

# Ohio University

Undergraduate Catalog 1991-92

July 1991



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# Ohio University

## Undergraduate Catalog 1991-92

The fees, programs, and requirements contained in this catalog are effective with the 1991 fall quarter.

They are necessarily subject to change without notice at the discretion of Ohio University. It is the student's responsibility to know and follow current requirements and procedures at the departmental, college, and University levels.

Ohio University is fully accredited by the North Central Association of Colleges and Schools at the bachelor's, master's, and doctoral levels.

In addition, numerous departments, colleges, and schools within the University hold individual accreditation from their professional accrediting agencies.

*Ohio University is an affirmative action institution.*

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# Academic Calendar, 1991-92

## Fall Quarter, 1991

- Aug. 9, *Fri.* . . . . . Last day to pay fees for fall quarter (to ensure preregistration)
- Sept. 10, *Tues.* . . . . . Payment deadline for students on Monthly Payment Plan (1st payment for fall quarter)
- Sept. 12, *Thurs.* . . . . . Residence halls open for *precollege and on-campus groups only*; orientation begins for all new freshmen and transfer students not attending summer precollege
- Sept. 13, *Fri.* . . . . . Residence halls officially open at 10 a.m.
- Sept. 14, *Sat.* . . . . . Advising Day; Class Schedule Adjustment Day; Registration Day; first meal served on board plan (breakfast)
- Sept. 15, *Sun.* . . . . . Freshman Class Day
- Sept. 16, *Mon.* . . . . . Classes begin — Athens and regional campuses
- Sept. 20, *Fri.* . . . . . Last day to register and/or pay fees without late fee
- Sept. 23-27 . . . . . Late Registration and/or Fee Payment Penalty — \$20
- Sept. 24, *Tues.* . . . . . Last day for filing application and paying fee for conferral of degree on November 27
- Sept. 27, *Fri.* . . . . . Last day to add a class by change order through your dean's office; last day to receive partial refund of registration fees (80%); last day to register for pass/fail course; last day to process a change order without paying fee
- Sept. 30, *Mon.* . . . . . Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF
- Sept. 30-Oct. 4 . . . . . Late Registration and/or Fee Payment Penalty — \$40
- Oct. 7-11 . . . . . Late Registration and/or Fee Payment Penalty — \$60
- Oct. 10, *Thurs.* . . . . . Payment deadline for students on Monthly Payment Plan (3rd payment for fall quarter)
- Oct. 12, *Sat.* . . . . . Homecoming (Football with Bowling Green)
- Oct. 14-18 . . . . . Late Registration and/or Fee Payment Penalty — \$80
- Oct. 18, *Fri.* . . . . . Last day to drop a class by change order through your dean's office
- Oct. 21-25 . . . . . Late Registration and/or Fee Payment Penalty — \$100
- Oct. 25, *Fri.* . . . . . After October 25 registration forms will no longer be processed or accepted. *NO* fall quarter fee payment will be accepted and registration will be cancelled; last day for removing incomplete grades incurred during last session enrolled
- Oct. 26, *Sat.* . . . . . Parents Day (Football with Kent State); Honors Convocation for undergraduate scholarship students and parents
- Oct. 28-31 . . . . . Winter quarter preregistration and academic advising
- Nov. 8, *Fri.* . . . . . Payment deadline for students on Monthly Payment Plan (1st payment for winter quarter)
- Nov. 11, *Mon.* . . . . . Veterans Day holiday observed (University offices officially closed; classes in session)
- Nov. 19, *Tues.* . . . . . Last day to withdraw from the University for fall quarter
- Nov. 20, *Wed.* . . . . . Last day of classes
- Nov. 21, *Thurs.* . . . . . Examinations begin
- Nov. 27, *Wed.* . . . . . Quarter Closing Date; last meal served on board plan (lunch); residence halls close at 5 p.m.
- Nov. 28, *Thurs.* . . . . . Thanksgiving Day (University closed)
- Nov. 29, *Fri.* . . . . . Columbus Day holiday observed (University closed)
- Dec. 2, *Mon.* . . . . . Deadline for all grades, including pending grades from previous quarters, for degree candidates; Last day to pay fees for winter quarter (to ensure preregistration)
- Dec. 10, *Tues.* . . . . . Payment deadline for students on Monthly Payment Plan (2nd payment for winter quarter)
- Dec. 24, *Tues.* . . . . . Martin Luther King Day holiday observed (University closed)
- Dec. 25, *Wed.* . . . . . Christmas Day (University closed)
- Dec. 31, *Tues.* . . . . . President's Day holiday observed (University closed)
- Jan. 1, *Wed.* . . . . . New Year's Day (University closed)

## Winter Quarter, 1992

- Jan. 5, *Sun.* . . . . . Residence halls open at 10 a.m.; new student orientation begins at 12:30 p.m.
- Jan. 6, *Mon.* . . . . . Advising Day; Class Schedule Adjustment Day; Registration Day; first day of classes on regional campuses; first meal served on board plan (breakfast)
- Jan. 7, *Tues.* . . . . . Classes begin — Athens campus
- Jan. 10, *Fri.* . . . . . Payment deadline for students on Monthly Payment Plan (3rd payment for winter quarter)  
Last day to register and/or pay fees without late fee
- Jan. 13-17 . . . . . Late Registration and/or Fee Payment Penalty — \$20
- Jan. 15, *Wed.* . . . . . Martin Luther King Day observed (All University offices open; employees' paid holiday was December 24. Classes **not** in session, *except classes meeting 4 p.m. or after*)
- Jan. 16, *Thurs.* . . . . . Last day for filing application and paying fee for conferral of degree on March 21
- Jan. 20, *Mon.* . . . . . Last day to add a class by change order through your dean's office; last day to receive partial refund of registration fees (80%); last day to register for pass/fail course; last day to process a change order without paying fee

- |                |       |  |
|----------------|-------|--|
| Jan. 20-24     | ..... | Late Registration and/or Fee Payment Penalty — \$40  |
| Jan. 21, Tues. | ..... | Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF  |
| Jan. 27-31     | ..... | Late Registration and/or Fee Payment Penalty — \$60  |
| Feb. 3-7       | ..... | Late Registration and/or Fee Payment Penalty — \$80  |
| Feb. 4-7       | ..... | Spring quarter preregistration and academic advising   |
| Feb. 10, Mon.  | ..... | Last day to drop a class by change order through your dean's office<br>Payment deadline for students on Monthly Payment Plan (1st payment for spring quarter)          |
| Feb. 10-14     | ..... | Late Registration and/or Fee Payment Penalty — \$100   |
| Feb. 14, Fri.  | ..... | After February 14 registration forms will no longer be processed or accepted. <i>NO</i> winter quarter fee payment will be accepted and registration will be cancelled |
| Feb. 17, Mon.  | ..... | Last day for removing incomplete grades incurred during last session enrolled  |
| Mar. 2, Mon.   | ..... | Last day to pay fees for spring quarter (to ensure preregistration)  |
| Mar. 10, Tues. | ..... | Payment deadline for students on Monthly Payment Plan (2nd payment for spring quarter)   |
| Mar. 13, Fri.  | ..... | Last day to withdraw from the University for winter quarter  |
| Mar. 14, Sat.  | ..... | Last day of classes  |
| Mar. 16, Mon.  | ..... | Examinations begin   |
| Mar. 20, Fri.  | ..... | Last meal served on board plan (dinner)  |
| Mar. 21, Sat.  | ..... | Quarter Closing Date; residence halls close at 2 p.m.  |
| Mar. 23, Mon.  | ..... | Deadline for all grades, including pending grades from previous quarters, for degree candidates  |

### Spring Quarter, 1992

- |                             |   |
|-----------------------------|---|
| Mar. 29, <i>Sun.</i> .....  | Residence halls open at 10 a.m.; new student orientation begins at 12:30 p.m.   |
| Mar. 30, <i>Mon.</i> .....  | Advising Day; Class Schedule Adjustment Day; Registration Day; first day of classes on regional campuses; first meal served on board plan (breakfast)   |
| Mar. 31, <i>Tues.</i> ..... | Classes begin — Athens campus   |
| Apr. 3, <i>Fri.</i> .....   | Last day to register and/or pay fees without late fee   |
| Apr. 6, <i>Mon.</i> .....   | Last day for filing application and paying fee for conferral of degree on June 12-13  |
| Apr. 6-10 .....             | Late Registration and/or Fee Payment Penalty — \$20   |
| Apr. 6-24 .....             | Summer quarter preregistration  |
| Apr. 10, <i>Fri.</i> .....  | Payment deadline for students on Monthly Payment Plan (3rd payment for spring quarter)  |
| Apr. 13, <i>Mon.</i> .....  | Last day to add a class by change order through your dean's office; last day to receive partial refund of registration fees (80%); last day to register for pass/fail course; last day to process a change order without paying fee |
| Apr. 13-17 .....            | Late Registration and/or Fee Payment Penalty — \$40   |
| Apr. 14, <i>Tues.</i> ..... | Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF   |
| Apr. 20-24 .....            | Late Registration and/or Fee Payment Penalty — \$60   |
| Apr. 27-May 1 .....         | Late Registration and/or Fee Payment Penalty — \$80   |
| May 4, <i>Mon.</i> .....    | Last day to drop a class by change order through your dean's office   |
| May 4-8 .....               | Late Registration and/or Fee Payment Penalty — \$100  |
| May 8, <i>Fri.</i> .....    | After May 8 registration forms will no longer be processed or accepted. <i>NO</i> spring quarter fee payment will be accepted and registration will be cancelled  |
| May 11, <i>Mon.</i> .....   | Last day for removing incomplete grades incurred during last session enrolled   |
| May 18-21 .....             | Fall quarter preregistration and academic advising  |
| May 25, <i>Mon.</i> .....   | Memorial Day holiday observed (University offices officially closed; classes <i>not</i> in session)   |
| June 1, <i>Mon.</i> .....   | Last day to pay fees for summer quarter (to ensure preregistration)   |
| June 5, <i>Fri.</i> .....   | Last day to withdraw from the University for spring quarter   |
| June 6, <i>Sat.</i> .....   | Last day of classes   |
| June 8, <i>Mon.</i> .....   | Examinations begin  |
| June 12, <i>Fri.</i> .....  | Annual Graduate Commencement  |
| June 13, <i>Sat.</i> .....  | Quarter Closing Date; Annual Undergraduate Commencement; last meal served on board plan (breakfast); residence halls close at 5 p.m.  |
| June 16, <i>Tues.</i> ..... | Deadline for all grades, including pending grades from previous quarters, for degree candidates   |

## Summer Quarter, 1992

### First Term

- June 14, *Sun.* . . . . . Residence halls open at 10 a.m.; new student orientation begins at 12:30 p.m.  
June 15, *Mon.* . . . . . Registration Day; classes begin; first meal served on board plan (breakfast)  
June 18, *Thurs.* . . . . First term students should apply and pay fee for conferral of undergraduate and graduate degrees for summer session (August 22); final deadline for applying is July 23  
June 19, *Fri.* . . . . . Last day to register for first five-week term; last day to add a class by change order through your dean's office; last day to receive partial refund of registration fees (80%) for first five-week term; last day to register for pass/fail course; last day to process a change order without paying fee

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June 22, *Mon.* . . . . . Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF  
June 26, *Fri.* . . . . . Last day to receive partial refund of registration fees (80%) for ten-week courses  
June 30, *Tues.* . . . . . Last day to drop a class for first term by change order through your dean's office  
July 3, *Fri.* . . . . . Independence Day (University offices officially closed; classes *not* in session)  
July 16, *Thurs.* . . . . . Last day to withdraw from first summer term  
July 17, *Fri.* . . . . . Last day to drop a ten-week course; last day of classes/examinations  
July 18, *Sat.* . . . . . Term closing date; first term only residents must vacate residence halls by 2 p.m.  
July 20, *Mon.* . . . . . Deadline for all grades, including pending grades from previous quarters, for degree candidates

### **Second Term**

July 19, *Sun.* . . . . . Residence halls open at 10 a.m. for second term students; new student orientation begins at 12:30 p.m.  
July 20, *Mon.* . . . . . Registration Day; classes begin  
July 23, *Thurs.* . . . . . Last day for filing application and paying fee for conferral of undergraduate and graduate degrees on August 22  
July 24, *Fri.* . . . . . Last day to register for second five-week term; last day to add a class by change order through your dean's office; last day to receive partial refund of registration fees (80%) for second five-week term; last day to register for pass/fail course; last day to process a change order without paying fee  
July 27, *Mon.* . . . . . Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF  
Aug. 4, *Tues.* . . . . . Last day to drop a class for second term by change order through your dean's office  
Aug. 17, *Mon.* . . . . . Last day for removing incomplete grades incurred during last session enrolled  
Aug. 20, *Thurs.* . . . . . Last day to withdraw from second summer term  
Aug. 21, *Fri.* . . . . . Last day of classes/examinations; last meal served on board plan (dinner)  
Aug. 22, *Sat.* . . . . . Quarter Closing Date; residence halls close at 2 p.m. for summer session  
Aug. 24, *Mon.* . . . . . Deadline for all grades, including pending grades from previous quarters, for degree candidates

## **Direct Inquiries Concerning:**

Admissions information and acceptance of credits to the  
Office of Admissions, Chubb Hall  
Athletics to Intercollegiate Athletics, Convocation Center  
Campus tours to the Office of Admissions, Chubb Hall  
Continuing education, independent study, workshops, or conferences  
to the Office of Lifelong Learning, Tupper Hall  
Curricula and undergraduate degree requirements to the  
office of the dean of the college in question  
Financial aid, scholarships, loans, and student employment to the  
Office of Student Financial Aid and Scholarships, Chubb Hall  
Graduate study to the Office of Graduate Student Services, Wilson Hall  
Housing to the Office of University Housing, Chubb Hall  
Osteopathic medicine to the  
College of Osteopathic Medicine, Grosvenor Hall  
Registration, class schedules, and veterans affairs to the  
Registrar's Office, Chubb Hall  
Transfer students to the Office of Admissions, Chubb Hall  
Address as follows: Office Name  
Building or College  
Ohio University  
Athens OH 45701-2979

The University switchboard number is 614-593-1000

## Profile of Ohio University





## Profile of Ohio University

The charm of tree-lined brick walkways on Ohio University's College Green makes you feel as if you were attending a small college rather than a large university. Much of what goes on at Ohio University has this personalized feeling, a unique trait for a school of its size.

The City of Athens, home of the University, is located about 75 miles southeast of Columbus. It's a small city on the banks of the Hocking River, surrounded by small farms on the hills and in the valleys, along with woodlands and state parks. The intellectual and cultural atmosphere of the University could have no better setting for privacy or meditation when it is needed.

The heritage of Ohio University goes back to the 18th century and the Ordinance of 1787, which included a provision for establishing the school. The University was actually founded in 1804, making it the first institution of higher learning in the state of Ohio.

The three oldest buildings on the College Green, red brick structures with wooden shutters, date from the early 19th century and are fine examples of Georgian architecture. One of them, Cutler Hall, in the center of the campus, was built in 1816 and has been designated a National Historic Landmark.

The University offers a wide range of cultural activities not only to the University community but to all of southeastern Ohio. All of the lecturers, poets, singers, dancers, films, and theater or music groups appearing on campus are available within walking distance of the residence halls. Many events are free, though some do have nominal charges.

Stroud's Run State Park is just outside the Athens Corporation limit, and there are 11 more state parks and thousands of acres of national forest within 40 miles of the campus. The parks have facilities for swimming, boating, camping, hiking, picnicking, and fishing. When you need to get away, it's possible to walk for hours in the woods without running across dwellings, cars, or other people. But if city life is a necessity now and then, Columbus and Cincinnati are reasonably close.



## Campus Visits

The best way to know what our educational setting and living accommodations are like is to visit our campus. Walking tours lasting approximately one hour originate from the Office of Admissions at 10 a.m. and 2 p.m., Monday through Friday, and most Saturdays at noon. Group information sessions are available for prospective students at 11 a.m. and 1 p.m., Monday through Friday. On Saturdays the tour is preceded by a group information session at 11 a.m.

If you desire to speak with faculty members in your field of interest, we will attempt to schedule those appointments for you also. (Faculty appointments are available Monday through Friday only.) Please contact us at least one week in advance of your visit: Ohio University Office of Admissions, 120 Chubb Hall, Athens OH 45701-2979, phone: 614-593-4100.

**Visitors Center** — For help in finding your way around Ohio University and Athens, visit the Ohio University Visitors Center, the log structure at the corner of Richland Avenue and Shafer Street. The people there will help guide you to your destination, and they can also provide general information about University and community activities.

## Affirmative Action

It is the policy of Ohio University that there shall be no discrimination against any individual in educational or employment opportunities because of race, color, religion, national origin, sex, veteran status, or handicap. Also, there shall be no discrimination because of age except in compliance with requirements of retirement plans or state and federal laws and guidelines.

The Office of Affirmative Action monitors contract hiring of faculty and administrators; develops and implements programs and activities that give recognition to the value of diversity; coordinates services for disabled students and employees; advises students and employees about university policies and procedures regarding nondiscrimination; investigates complaints of discrimination; and seeks to foster a climate which encourages the full realization of the University's mission to promote a just and socially responsive community. Anyone with a concern about possible discrimination or harassment is encouraged to contact the office of Affirmative Action.

In coordinating services for persons with disabilities, the Office of Affirmative Action advises students and employees about specific resources available at Ohio University. See the Handicapped Services section of this catalog for more details.

**Sexual Harassment.** Sexual harassment of students, faculty, or staff is prohibited at Ohio University. The following is the definition of sexual harassment: unwanted sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of employment or of a student's status in a course, program, or activity; or
2. Submission to or rejection of such conduct is used as the basis for decisions affecting the individual; or
3. Such conduct has the purpose or effect of unreasonably interfering with the individual's work, performance, or educational experience; or creating an intimidating, hostile, or offensive environment.

Examples (not to be construed as exhaustive) of sexual harassment include:

1. Pressure, subtle or overt, for sexual favors, accompanied by implied or overt threats concerning one's job, grades, or letters of recommendation.
2. Inappropriate display of sexually suggestive objects or pictures.
3. Unnecessary touching, pinching, patting, or the constant brushing against another's body.
4. Use of sexually abusive language (including remarks about a person's clothing, body or bodily movement, or sexual activities).

All Ohio University employees and students are responsible for compliance with this policy. All University supervisory personnel have an affirmative responsibility to discourage and eliminate conduct inconsistent with this policy. Specific concerns or complaints regarding sexual harassment should be brought to the attention of the supervisor of the alleged offender. The offices of Judiciaries, Personnel, Affirmative Action, or the University Ombudsman may be consulted or apprised of the complaint. Such consultation will be held in absolute confidence and no action will be taken without the approval of the complainant.

Information regarding University programs and policies, as well as related state and federal provisions, are available through the Office of Affirmative Action, 101 Chubb House.





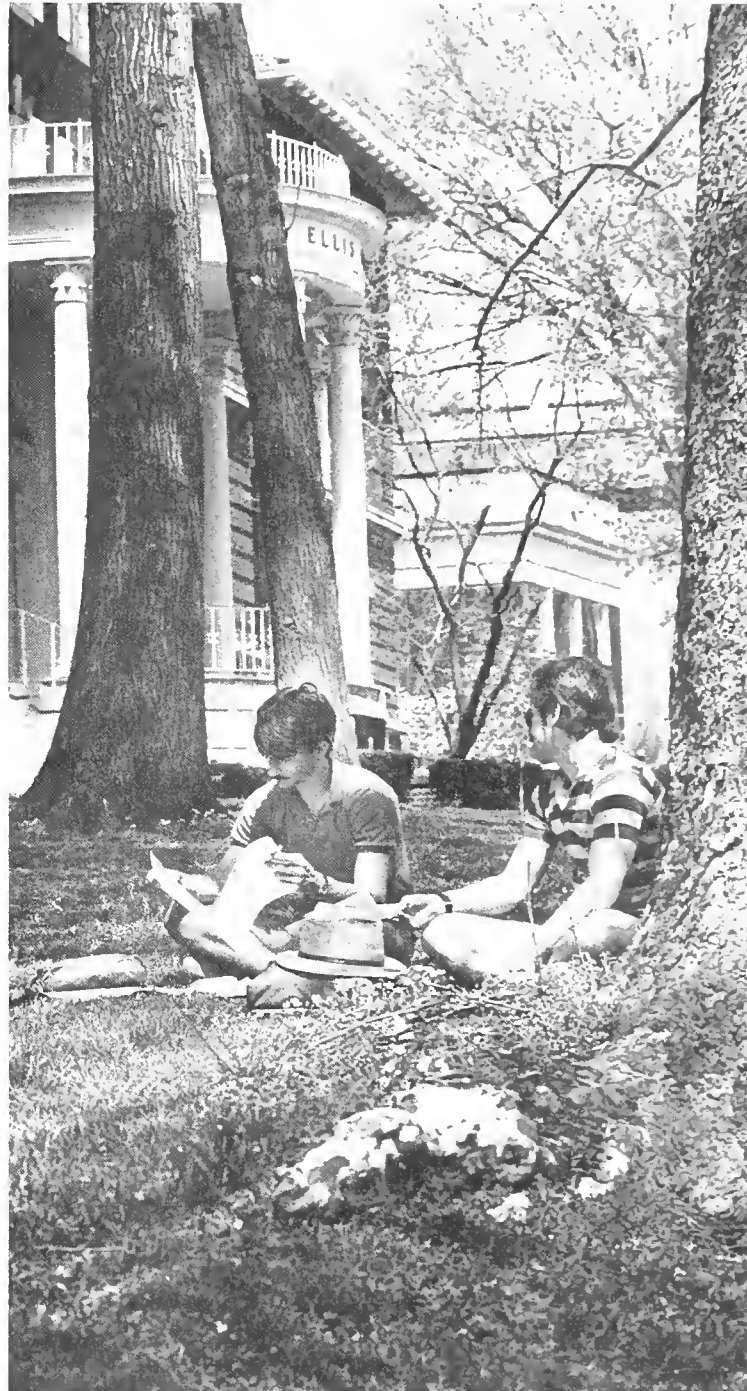
## The Student Body

We can safely say that a typical Ohio University student cannot be found, though the one characteristic we can apply to the student body is cultural diversity. The exposure to other races, nationalities, religions, and ethnic groups is a basic part of an educational experience. Even life in a city usually doesn't provide the diverse day-to-day contact you are likely to have on a campus with students from all over the United States, as well as from Africa, Asia, Europe, and other parts of the world. An understanding of different cultures and the forming of lasting personal relationships can be an invaluable result of this contact.

The International House within the residence hall system further provides American and international students with a living environment where sharing each other's cultural heritage becomes a daily experience. The newly formed International Understanding Honorary recognizes individuals in the Athens community and the University who initiate interaction with international students and enhance communication among the various cultures.

The special needs of student minority groups also have been met on the Ohio University campus. Courses, special interest programs, renowned speakers, and extracurricular activities address the concerns of minority students throughout the year.

Age is no barrier when it comes to learning at Ohio University. The adult, or nontraditional, student now comprises one third of all college students nationwide. Approximately 800 to 1,000 students on the Ohio University campus are adult learners who have returned to the classroom to fulfill career goals. The Office of Lifelong Learning, through the External Student Program, reaches a number of students across the country and throughout the world, who are pursuing their Ohio University degrees via Independent Study. The external students are nontraditional students engaged in careers or other activities which prevent them from attending the University or one of the regional campuses. Learning is increasingly being viewed as a life-long process, and Ohio University's nontraditional students are following this philosophy.





## Student Activities

Campus life is filled with opportunities. Cultural, social, and recreational programs and activities are planned regularly by student organizations and University departments.

Speakers and performing artists appearing in recent years include former president Jimmy Carter, Richard Leakey, Nikki Giovanni, Arthur M. Schlesinger, Jr., Nadia Salerno-Sonnenberg, William Bennett, Yo-Yo Ma, and the Juilliard String Quartet.

Popular performers have included The Robert Cray Band, Elvis Costello, the Fabulous Thunderbirds, Jay Leno, Stevie Ray Vaughn, Billy Idol, and Richard Marx.

Over 270 student organizations exist on campus. Social fraternities and sororities, as well as honorary, departmental, professional, international, service, governance, recreational, and special interest groups are included. Many significant national honor societies, including Phi Beta Kappa and Phi Delta Kappa, have chapters on campus.





### Intercollegiate Athletics

Ohio University is a Division I member of the NCAA and a charter member of the Mid-American Conference, which includes Ball State, Bowling Green, Central Michigan, Eastern Michigan, Kent, Miami, Toledo, and Western Michigan Universities. Ohio University sports for men are baseball, basketball, cross country, football, golf, swimming and diving, track and field, and wrestling. University sports for women are basketball, cross country, field hockey, softball, swimming and diving, track and field, and volleyball.

### Recreation

There are many recreational opportunities for men and women in the extensive intramural program. In addition, Baker Center (the University student center) provides facilities for bowling, billiards, and video games, as well as rooms for student meetings and campus-wide social and cultural events.

Club sports at Ohio University include hockey, lacrosse, and rugby, and athletic facilities include the Aquatic Center, a gymnasium, an indoor ice-skating rink, tennis courts, and areas for horseshoe pitching and softball. The West Green is the site of the athletic complex, and the multimillion-dollar Convocation Center is the major sports arena, as well as concert site, in southeastern Ohio.

Several movies are shown on campus each week. Some are first-run films of a year or so ago, while others are foreign film classics and experimental movies. The showings are sponsored by campus organizations at reduced prices.

## Residence Hall Life

The residence hall areas are divided into three specific areas called greens. The individual halls are reserved exclusively for a particular type of student (i.e., freshman, upperclass, graduate, etc.), recognizing the special needs of each. University services are provided in all of the halls through the professionally trained live-in staff and consultants from other segments of the University community.

Particular emphasis is placed on meeting the needs of the new freshman student through the Freshman Residential Program. This program is committed to providing those services, skills, and growth opportunities that are so necessary to successful completion of a student's college career through interaction with faculty, staff, and other students within the University.

The special interests and talents of the individual student can be enhanced through participation in one or more of the many campus organizations. There is ample opportunity to participate in the government of the halls, greens, or the campus. Many of these programs have been and continue to be designed by and for student residents.



## Individual Counseling/Advising

Counseling at Ohio University is available to help students with definite areas of interest, as well as to those who are undecided.

First, admissions counselors can help students determine if Ohio University is the appropriate place for their studies. Faculty advisors in all departments can help decide if a suitable field has been chosen. If a student does not have a precise area of interest or major, University College counselors can be of assistance. University College offers a Bachelor of Specialized Studies degree, which allows students to structure their own degree programs, taking a wider variety of courses than would be possible through a major.

Counseling and Psychological Services provides career counseling, educational counseling, and personal adjustment problem assistance on a confidential basis. Individual and/or group counseling and psychological therapy are available.

The Office of Career Planning and Placement assists students in all aspects of career development. Advisors help students assess how their interests, abilities, and values relate to career choices. Computerized career inventories and other assessment instruments are available to aid in this process.

Advisors assist students individually and in group sessions with the job search process, including resume preparation and development of interview skills. The Mock Interview Program allows students to practice and improve their interview performance. The Career Resource Library contains a wealth of material useful throughout the career decision-making process: career information, employer directories, graduate school guides, graduate admissions test bulletins, internship/summer job listings, employer literature, and professional job vacancies.





## Academic Information

Students with definite areas of interest are admitted directly to the degree colleges of their choice and are assigned to faculty advisors. If the student has decided on a college but not a major, he or she may still enter the college. Undecided students and those who wish to explore several academic areas may be admitted to University College. Except for a University-wide freshman English composition requirement, there are no freshman course requirements common to all students; those with tentative majors refer to the specific requirements outlined under colleges in this catalog.

## Faculty

The possibilities of personal contact are enhanced by the low student-faculty ratio. Though first-quarter freshmen are likely to be in fairly large classes in survey and introductory courses, class size tends to diminish as one's class rank increases. Upperclass students will have classes near or below the 21:1 ratio.

Faculty members also interact with students outside the classroom as club advisors, mentors, or faculty fellows.

Ohio University recognizes teaching as the faculty's primary responsibility.

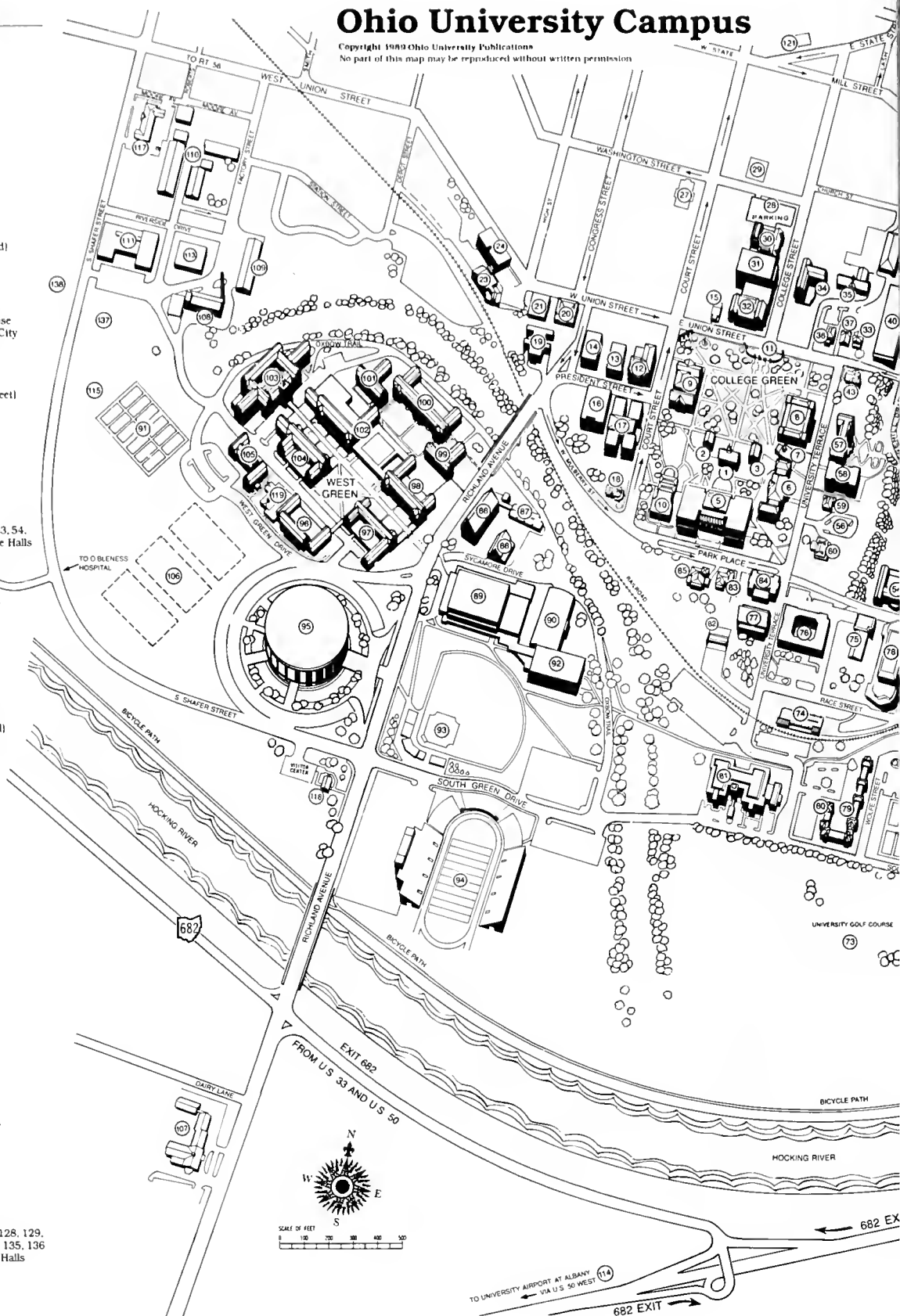
# Ohio University Campus

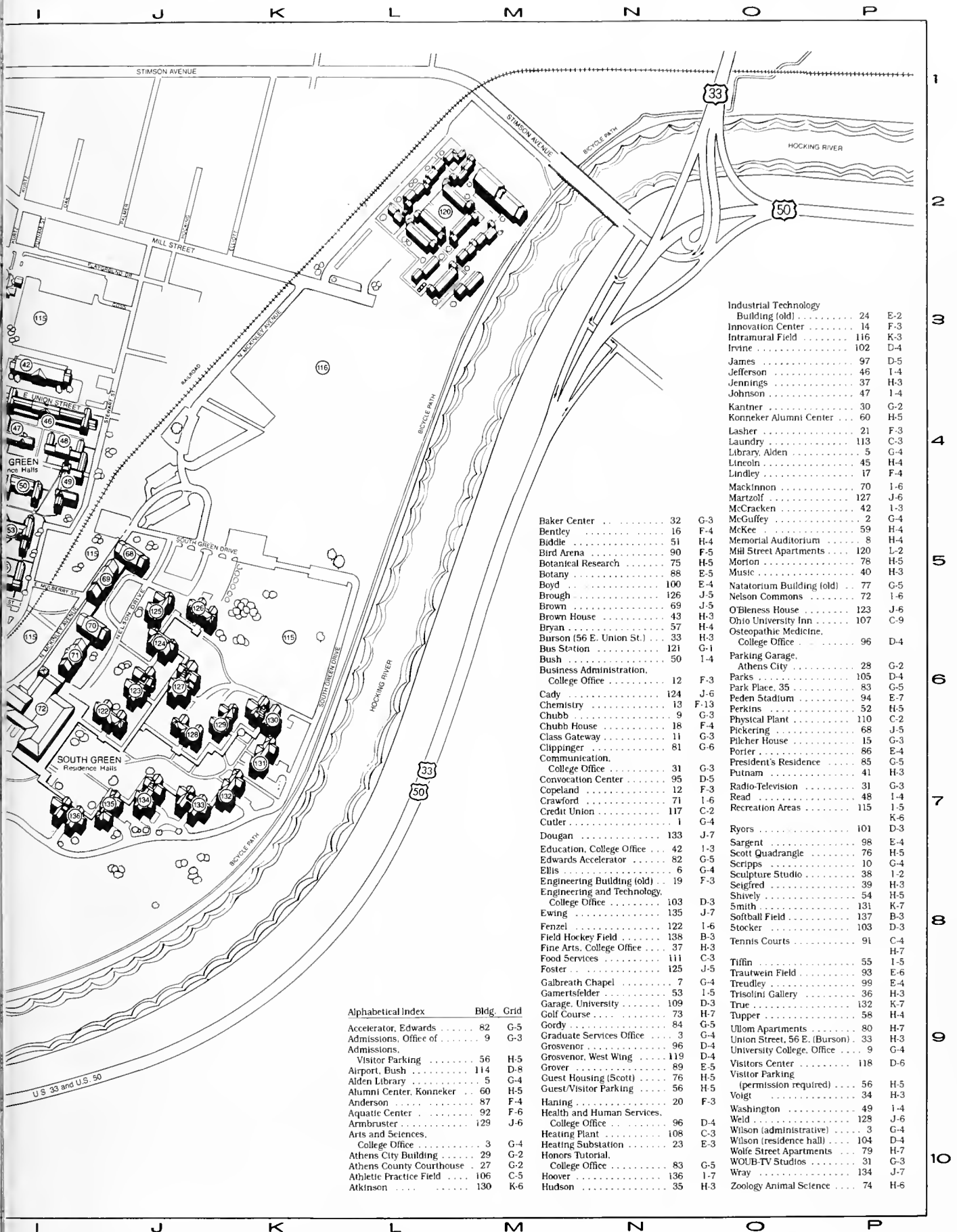
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## Library

The seven story Alden Library houses well over 1.5 million bound volumes, including periodicals and government documents. Current issues of more than 10,000 periodicals and newspapers are available, plus almost 2 million items, including microfilm units, cassettes, videotapes, disks, maps, and other research materials. The building will seat 2,800.

## Honor Societies

These national organizations confer memberships in recognition of high scholastic attainment and the fulfillment of other constitutional requirements. Some of the societies recognize and encourage the development of a well-rounded personality and leadership and service qualities, in addition to academic achievement.



Alpha Epsilon Rho, *Broadcasting*  
 Alpha Kappa Delta, *Sociology*  
 Alpha Lambda Delta, *Scholarship*  
 Alpha Pi Mu, *Industrial Engineering*  
 Angel Flight, *Aerospace Studies*  
 Arnold Air Society, *Aerospace Studies*  
 Beta Alpha Psi, *Accounting*  
 Beta Gamma Sigma, *Business Administration*  
 Blue Key, *Scholarship, Activities*  
 Chimes Jr. Honor Society  
 Delta Phi Alpha, *German*  
 Delta Sigma Pi, *Business Administration*  
 Delta Sigma Rho-Tau Kappa Alpha, *Forensics*  
 Eta Kappa Nu, *Electrical Engineering*  
 Gamma Pi Delta, *Nontraditional Students*  
 Golden Key, *Scholarship*  
 Honor Society of Nursing  
 International Understanding Honor Society  
 Kappa Delta Pi, *Education*  
 Kappa Kappa Psi, *Band*  
 Kappa Tau Alpha, *Journalism*  
 Mortar Board, *Scholarship, Activities*  
 Omicron Delta Epsilon, *Economics*  
 Omicron Delta Kappa, *Scholarship, Activities, Leadership*  
 Order of Omega, *Greek Leadership*  
 Pershing Rifles, *Military Science*  
 Phi Alpha Theta, *History*  
 Phi Beta Kappa, *Scholarship*  
 Phi Delta Kappa, *Education*  
 Phi Eta Sigma, *Scholarship*  
 Phi Gamma Nu, *Business*  
 Phi Kappa Phi, *Scholarship*  
 Phi Mu Alpha, *Music*  
 Phi Sigma Iota, *Romance Languages*  
 Phi Upsilon Omicron, *Home Economics*  
 Pi Gamma Mu, *Political Science, Social Sciences*  
 Pi Kappa Lambda, *Music*  
 Pi Mu Epsilon, *Mathematics*  
 Psi Chi, *Psychology*  
 Rho Lambda, *National Greek Honorary*  
 Sigma Alpha Iota, *Music*  
 Sigma Delta Pi, *Spanish*  
 Sigma Pi Sigma, *Physics*  
 Sigma Sigma Phi, *Osteopathic Medicine*  
 Sigma Xi, *Science*  
 Society for Professional Journalists/  
 Sigma Delta Chi, *Journalism*  
 Tau Beta Pi, *Engineering*  
 Tau Beta Sigma, *Band*  
 Women in Communications, Inc., *Journalism*



## Guidelines and General Information



# Academic Organization

## College of Arts and Sciences

Preprofessional curricula. Curricula leading to the Bachelor of Arts, Bachelor of Science degrees. Preparation for teaching at the secondary level.

Departments and Units:

Afro-American Studies  
 Botany  
 Chemistry  
 Classical Languages  
 Computer Science  
 Economics  
 English Language and Literature  
 Environmental Studies  
 Geography  
 Geological Sciences  
 Gerontology  
 History  
 Institute for Local Government  
     Administration and Rural Development  
 International Studies  
 Linguistics  
     Arabic  
     Chinese  
     Indonesian/Malaysian  
     Japanese  
     Swahili  
 Mathematics  
 Modern Languages  
     French  
     German  
     Italian  
     Russian  
     Spanish  
 Ohio Program of Intensive English (OPIE)  
 Philosophy  
 Physics and Astronomy  
 Political Science  
 Psychology  
 Social Studies  
 Social Work  
 Sociology and Anthropology  
 Women's Studies  
 Zoological and Biomedical Sciences

## College of Business Administration

Curricula leading to the Bachelor of Business Administration degree.

Departments:

Accounting  
 Finance  
 Management Systems  
 Marketing

## College of Communication

Curricula leading to Bachelor of Science in communication, and Bachelor of Science in journalism degrees.

Schools:

Communication Systems Management  
 Interpersonal Communication  
 Journalism  
 Telecommunications  
 Visual Communication  
     Interdisciplinary program co-administered with the College of Fine Arts

## College of Education

Teacher-training curricula leading to the Bachelor of Science in education degree; supervision of student teaching and other field experiences in education.

Schools:

Applied Behavioral Sciences and  
 Educational Leadership  
 Curriculum and Instruction

## College of Engineering and Technology

Curricula leading to the Bachelor of Science in airway science, Bachelor of Science in chemical engineering, Bachelor of Science in civil engineering, Bachelor of Science in electrical engineering, Bachelor of Science in industrial and systems engineering, Bachelor of Science in mechanical engineering, and Bachelor of Science in industrial technology.

Departments:

Aviation  
 Chemical Engineering  
 Civil Engineering  
 Electrical and Computer Engineering  
 Industrial and Systems Engineering  
 Industrial Technology  
 Mechanical Engineering

## College of Fine Arts

Curricula leading to the Bachelor of Fine Arts and Bachelor of Music degrees.

Schools:

Art  
     Art Education  
     Art History  
     Art Therapy  
     Ceramics  
     Graphic Design  
     Painting  
     Photography  
     Printmaking  
     Sculpture  
     Studio Arts

Dance

Music

Music Education  
 Music History and Literature  
 Music Theory and Composition  
 Music Therapy  
 Music Therapy/Education  
 Orchestral Instruments  
 Organ Performance  
 Piano Performance  
 Voice Performance

Theater

Acting  
 Production Design and Technology  
 Theater Arts and Drama

Visual Communication

Interdisciplinary program co-administered with the College of Communication  
 Informational Graphics  
 Picture Editing/Page Design  
 Photo Communication  
 Photo Illustration  
 Multi Media

## Office of Graduate Student Services

Programs leading to the Master of Arts, Master of Business Administration, Master of Education, Master of Fine Arts, Master of Science, and Doctor of Philosophy degrees. (See Ohio University *Graduate Catalog*.)

## College of Health and Human Services

Curricula leading to the Bachelor of Science in hearing and speech sciences; the Bachelor of Science in home economics; the Bachelor of Science in nursing; the Bachelor of Science in physical therapy; and the Bachelor of Science in environmental health; health; physical education; recreation; or sport sciences.

### Schools:

- Health and Sport Sciences
- Hearing and Speech Sciences
- Home Economics
- Nursing
- Physical Therapy

## Honors Tutorial College

A degree college with 24 specialized majors, many of which can be completed in three years. Selected undergraduates take tutorials in their majors, courses as required by academic departments, and electives as desired. The student admitted to a tutorial program is exempt from General Education Requirements, except English composition, but depending upon his or her major, may be required to undertake an advanced creative or thesis project. A high percentage of the students in this college enter graduate or professional school. Ohio University applicants may request consideration for admission to the Honors Tutorial College and must indicate a major at the time of application.

## Center for International Studies

Jointly administers a Bachelor of Arts in international studies with the College of Arts and Sciences. For

nonmajors, the center offers a certificate of African, Asian, or Latin American studies to undergraduates as a supplement to the major.

- African Studies
- Latin American Studies
- Asian Studies

## Office of Lifelong Learning

Provides educational opportunities beyond the regular channels of the University by utilizing the resources of the University in nontraditional ways.

- Adult Learning Services
- Continuing Education, Conferences, and Workshops
- Independent Study (See separate catalog.)

## College of Osteopathic Medicine

Offers a four-year professional program leading to the degree of Doctor of Osteopathy. (See separate catalog.)

## Regional Campuses

- Belmont County
- Chillicothe
- Ironton
- Lancaster
- Zanesville
- Portsmouth Resident Credit Center

## University College

Basic college for exploratory students at the freshman level. Two-year terminal programs leading to the Associate in Arts, Associate in Science, Associate in Applied Science, Associate in Applied Business, and individualized studies degrees. Four-year programs leading to the Bachelor of Specialized Studies and Bachelor of Criminal Justice degrees. Two- and four-year Reserve Officers Training Corps programs leading to commissions in the U.S. Air Force and the U.S. Army.

## Admission and Fees

A special publication for prospective students describing the University, its programs, its admission procedures, and its history can be obtained by writing to the Office of Admissions, 120 Chubb Hall, Ohio University, Athens OH 45701-2979. Applications for admission to study at the undergraduate level may be obtained from the Office of Admissions.

Application materials and additional information about graduate study are available upon request to the Office of Graduate Student Services, 301 Wilson Hall, Ohio University, Athens OH 45701-2979.

### WHEN TO APPLY

A person may apply for admission to undergraduate study following the junior year in high school.

New students are admitted to the fall quarter, which opens the second week in September; the winter quarter, which opens the first week in January; the spring quarter, which opens the fourth week in March; or summer sessions, with terms which open the third week of June and the fourth week of July.

March 15 is the freshman application deadline for the fall quarter. Applications for other terms are accepted up to one month before classes begin.

Deadlines for transfer students are as follows:

	Applications	Transcripts
Fall	June 1	July 1
Winter	December 1	December 15
Spring	March 1	March 15
Summer	June 1	June 1

**Campus Visits:** Group information sessions are available for prospective students at 11 a.m. and 1 p.m., Monday through Friday. Tours of the campus are given weekdays at 10 a.m. and 2 p.m. beginning from the Office of Admissions. On Saturdays, a group information session is conducted at 11 a.m., followed by a tour at noon. The Office of Admissions also can arrange appointments with specific academic departments of the student's interest. Appointments with academic departments, available only Monday through Friday, may be made by telephoning the Office of Admissions at 614-593-4100 in advance of the visit.

The Office of Admissions sponsors a series of weekend programs for prospective students. Full details and reservation forms are available from the Office of Admissions.

### APPLICATION PROCEDURES

The applicant's level of formal education and place of residence determine the procedures he or she follows in applying for admission to the University.

**Freshman Applicant.** A person who (1) has or soon will receive a secondary school diploma or a High School Equi-

valency Certificate and (2) has not been enrolled for 12 or more quarter hours of coursework at a college or university, applies as a freshman applicant.

To apply for freshman admission, a student submits a completed application form, the nonrefundable \$25 application fee for Athens-campus applicants (\$15 for regional-campus applicants), ACT or SAT scores, and an official high school transcript (sent directly from the high school to the Office of Admissions). Note that ACT or SAT scores are not required of students who have been out of high school for one year or more.

Beginning in November and continuing through April, those who have submitted their transcripts and test scores for fall admission will be notified of their admission status. Following admission, the student receives a residence hall contract and agreement form. Students must submit the required \$100 residence hall deposit prior to May 1 to hold a place for the fall quarter. Students and parents also will receive an invitation and details about the precollege orientation-registration program for entering students.

The Office of Admissions will waive the \$25 application fee for financially disadvantaged students upon the written recommendation of the high school guidance counselor. It is expected that such students will qualify for significant amounts of need-based financial aid.

**Early Admissions.** The University does admit a limited number of students each year who have completed the junior year of high school. Such students are expected to display the necessary intellectual capacity and social maturity to be successful in college. The student is urged to make arrangements to secure the high school diploma by the beginning of the sophomore year of college study or secure the High School Equivalency Certificate by taking the General Education Development Test. Students interested in early admissions should contact the Office of Admissions.

**Transfer Applicant.** A transfer applicant should (1) file an application form accompanied by a \$25 nonrefundable fee and (2) request that an official transcript be sent directly to the Office of Admissions from the registrar at each college or university previously attended.

Space is available in University residence halls for transfer students, and housing contracts will be mailed by the Housing Office shortly after admission has been granted.

A student who is applying for transfer to the College of Fine Arts is required to submit a portfolio or to audition. Students should make their own arrangements by contacting the appropriate school in the College of Fine Arts.

**International Student Applicant.** A citizen of another country should apply to the director of admissions if interested in undergraduate study or to the Office of Graduate Student Services if interested in graduate study.

The applicant should (1) file an international student admissions application; (2) complete official transcripts and pertinent certificates for all secondary and post-secondary work; and (3) such evidence as may be required by the University concerning the applicant's ability to meet the financial obligations of a student in the United States.

All international students and refugees are required to take an English placement test administered by the Ohio Program of Intensive English (OPIE) at the time of initial registration. Exemption or placement in a course of English as a Second Language (ESL) will be determined by the results of this examination. If the scores indicate placement in an ESL course, registration for the ESL course is mandatory.

Payment of the \$25 nonrefundable application fee must be made with the application.

An official translation must accompany transcripts and certificates which are not in English. *Do not submit docu-*

ments for which there is only one copy; documents submitted in support of an application cannot be returned to the owner.

Once admission is granted, the student receives a residence hall contract and an I-20 form to be used in securing a student visa. The housing contract is to be completed and returned to the University prior to arrival on campus.

**Nondegree Student.** If an applicant wishes to carry a limited number of courses at the University but is not interested in earning a degree, he or she may apply for admission as a nondegree student.

Such a person may be approved for registration upon completion of a nondegree student application. If a transcript of previous coursework or any credential is necessary, the Office of Admissions will notify the student.

The University currently charges a \$15 nonrefundable application fee for nondegree students. This fee is not charged to *summer-only* nondegree students.

**Re-enrolling Applicant.** If a person has previously attended as an undergraduate student but is not currently enrolled at Ohio University as a full-time or part-time student on the Athens and/or regional campuses and wishes to return as an undergraduate student, he or she may apply as a re-enrolling applicant. Any student who has been dropped from the University or whose records have a hold on them must have this cleared through the appropriate office before re-enrollment can be processed.

A re-enrolling applicant should file with the Office of Admissions (1) an application form for re-enrollment and (2) a transcript from each post-secondary institution in which he or she has been registered since last enrolled at Ohio University.

Space is available in University residence halls for re-enrolling students, and contracts will be mailed by the Housing Office shortly after admission has been granted.

**Courses for High School Students.** Ohio University offers college courses for students still enrolled in high school. Under this program a high school student may enroll in University courses during the academic year concurrently with high school enrollment or during the summer sessions. To be admitted to this program, the high school student must have the approval of the high school principal or guidance counselor for any study during the regular academic year. Further information about the program may be obtained from the Office of Admissions.

## ADMISSION REQUIREMENTS

To maximize chances for college success, Ohio University recommends that a freshman applicant's high school background include the following:

- 4 years of English, with an emphasis on composition
- 3 years of mathematics (algebra I, algebra II, plane geometry) one of which should be taken in the senior year
- 3 years of social studies
- 3 years of science
- 2 years of foreign language
- 1 year of visual and performing arts (art, band, chorus, music, orchestra, theater, etc.)

**Freshman Applicant.** Because the demand for admission to Ohio University is great, admission and housing are assigned to the best-qualified applicants. Admission to Ohio University is based upon high school performance (class rank, grade-point average, and curriculum), aptitude

test scores (ACT and/or SAT), recommendation of the high school, and special ability, talent, or achievement.

**Limited and Selective Admissions.** Admission to the University does not guarantee admission to a specific program of study. Currently, limited and/or selective admission policies are in effect for programs of study in athletic training, aviation, physical therapy, the College of Business Administration, the School of Journalism, the Honors Tutorial College, and the College of Fine Arts. Please consult the specific academic department or the Office of Admissions for details regarding limited and selective admission policies.

**Transfer Applicant.** To be eligible for admission as a transfer student to the Athens Campus, an applicant must have completed at least 30 quarter hours of transferable credit from a regionally accredited university with a minimum of a 2.5 cumulative grade-point average on a 4.0 scale. The student also must be in good standing in all respects. A student wishing to transfer from an institution which does not have regional accreditation may be required to have a grade-point average substantially above a 2.5. Several of the colleges at Ohio University have additional requirements for transfer student admission, including a grade-point average higher than 2.5. Please refer to the Colleges and Curricula section of this catalog for each college's or school's specific requirements. *It is to the student's advantage to enter the University during the fall quarter, and transfer students are strongly encouraged to apply for that term.*

**Transfer Credit Evaluation and Recording of Transfer Credit.** All credit earned at a regionally accredited college or university with a grade of C- or higher is accepted as transfer credit and can be used to satisfy degree requirements in the same manner as credit earned at Ohio University. Remedial courses taken at the college or university level are not transferable. All grades for transfer credit are converted to a T grade symbol on the student's permanent academic record. The number of transferable quarter hours of credit is recorded on the academic record, but no quality points are recorded. Transfer students, therefore, enter Ohio University with no grade-point average on the Ohio University academic records.

Normally, courses in which a D grade was earned are not acceptable for transfer. Such a course will transfer, however, if (1) it was a specific prerequisite (as stated in the previous school's catalog) for a later course in the same department, and (2) a grade of C- or better was earned in that later course. Students meriting credit under this stipulation must contact the Office of Admissions, Chubb Hall, to receive credit for this coursework.

A student who has attended an institution which does not have regional accreditation may be required to have a grade-point average substantially above 2.5 and may have only part or in some cases none of his or her previously earned credit accepted. Any credit earned at such an institution is only accepted provisionally, and must be validated by the student's performance at Ohio University.

The Office of Admissions will send a tentative transfer credit evaluation report shortly after the student has been granted admission to the University.

**Institutional Transfer.** The Ohio Board of Regents, following the directive of the Ohio General Assembly, has developed a new statewide policy to aid in the movement of students and transfer credits from one Ohio public college or university to another. The purpose is to avoid duplication of course requirements and to improve student mobility throughout Ohio's higher education system. Since independent colleges and universities in Ohio may or may not



be participating in the transfer policy, students interested in transferring to an independent institution are encouraged to check with the college or university of their choice regarding transfer agreements.

**Transfer Module.** The new Ohio Board of Regents' Transfer and Articulation Policy has established the Transfer Module, which is a specific subset or the entire set of a college or university's General Education Requirements. The Transfer Module contains 54-60 quarter hours or 36-40 semester hours of specified course credits in English composition, mathematics, fine arts, humanities, social science, behavioral science, natural science, physical science, and interdisciplinary coursework.

A transfer module completed at one college or university will automatically meet the requirements of the transfer module at the receiving institution, once the student is accepted. Students may be required, however, to meet additional General Education Requirements that are not included in the Transfer Module.

**Conditions for Transfer Admission.** Students meeting the requirements of the Transfer Module are subject to the following conditions:

1. The policy encourages receiving institutions to give *preferential consideration* for admission to students who complete the Transfer Module and either the Associate of Arts or the Associate of Science degrees. These students will be able to transfer all courses in which they received a passing grade of D or better. Students must have an overall g.p.a. of 2.0 to be given credit for the Transfer Module.
2. The policy also encourages receiving institutions to give *preferential consideration* for admission to students who complete the Transfer Module with a grade C or better in each course and 90 quarter hours or 60 semester hours. Students must have an overall g.p.a. of 2.0 to be given credit for the Transfer Module, and only courses in which a C or better has been earned will transfer.
3. The policy encourages receiving institutions to admit on a *nonpreferential consideration basis* students who complete the Transfer Module with a grade of C or better in each course and less than 90 quarter hours or 60 semester hours. These students will be able to transfer all courses in which they received a grade of C or better.

Admission to a given institution, however, does not guarantee that a transfer student will be admitted automatically to all majors, minors, or fields of concentration at that institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as all other students. Furthermore, transfer students shall be accorded the same class standing and other privileges as nontransfer students on the basis of the number of credits earned. All residency requirements must be successfully completed at the receiving institution prior to the granting of a degree.

**Responsibilities of Transfer Students.** To assure maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will accord with the receiving institution's major. Students are encouraged to seek fur-

ther information regarding transfer from both their advisor and the college or university to which they plan to transfer.

**NOTE:** The deadline for application and the required grade-point average are subject to change without notice.

**Evaluation of Technical College Credits.** A student who has completed an associate degree from a regents-approved Ohio college will have accepted for transfer credit all the general education coursework for which the degree was awarded if completed with a grade of C- or better. These credits will be accepted by all colleges of Ohio University toward meeting the minimum total credits required for a baccalaureate degree. The applicability of these transferred credits toward meeting the requirements of the program the prospective student wishes to enter can be determined in advance on request to the Office of Admissions. Requests should specify in which program the student is interested and should be accompanied by a transcript of record.

In addition to the policy described above, Ohio University has worked out certain credit evaluations with Ohio community and technical colleges which allow the technical college graduate to earn a bachelor's degree in approximately two years provided he or she continues in the corresponding academic area at the University. For a detailed description of these programs, contact the Office of Admissions.

**Armed Forces Credit.** Some courses provided by the Armed Forces are the equivalent of college courses, and transfer credit may be obtained by presenting certificates or a diploma describing the training received. A *Guide* published by the American Council on Education is used to determine what credit might be granted. Blanket credit is not granted for military service.

**Advanced Placement and Proficiency Examination Credit.** Any entering student who has taken an examination provided by the Advanced Placement (AP) program of the College Entrance Examination Board may, by achieving an appropriate score (generally three or higher), receive Ohio University credit and placement.

Ohio University also participates in the College Level Examination Program (CLEP) sponsored by the College Entrance Examination Board. Subject to approval by the appropriate department in each case, the University will allow credit for satisfactory performance on the CLEP subject-matter examinations, provided that the examinations are taken prior to formal enrollment at Ohio University. The University does not award any credit for scores achieved on the CLEP General Examinations.

Detailed information about both the AP and CLEP programs is available from high school guidance offices, from Ohio University, or by writing the College Entrance Examination Board, Box 592, Princeton NJ 08540.

**Non-Collegiate Training Programs.** Some courses offered by business and professional organizations are considered the equivalent of college courses, and transfer credit may be obtained by presenting transcripts or certificates of completion from the training program. A *Guide* published by the American Council on Education is used to determine what credit will be granted.

**International Baccalaureate Degree.** Ohio University recognizes the International Baccalaureate (I.B.) for both admission and placement. Contact the undergraduate counselor for international students in the Office of Admissions for details.

## ENTRANCE MEDICAL REQUIREMENTS

Entering students are not required to submit pre-enrollment physical examinations. A tuberculosis skin test administered by Student Health Service is required at the time of the student's arrival on campus of all new international students and those international students returning after an absence of two or more years. All positive reactors must undergo annual chest X-rays through Student Health Service while at the University.

A major medical insurance plan, designed to supplement the care provided by the University's Hudson Health Center, is mandatory for each student carrying more than six credit hours, unless he or she submits evidence of comparable private coverage.

## OHIO RESIDENCY

It is the responsibility of the student to report a change of address and/or residency from an Ohio resident to a non-Ohio resident at the Office of Student Records. If the student's residency has changed to an Ohio resident, he or she must file a residency petition with the Office of Admissions. No change of residency can be made until the residency petition has been approved by the University examiner. Questions concerning residency should be directed to the University examiner in the Office of Admissions.

The residency rules described below were adopted by the Ohio Board of Regents — effective November 1, 1989. The rules are subject to change without notice by the Ohio Board of Regents or the Ohio General Assembly.

### A. Intent and Authority

1. It is the intent of the Ohio Board of Regents in promulgating this rule to exclude from treatment as residents, as that term is applied here, those persons who are present in the state of Ohio primarily for the purpose of receiving the benefit of a state-supported education.

2. This rule is adopted pursuant to Chapter 119 of the Revised Code, and under the authority conferred upon the Ohio Board of Regents by Section 3333.31 of the Revised Code. Effective date: November 1, 1989.

### B. Definitions

For purposes of this rule:

1. A "resident of Ohio for all other legal purposes" shall mean any person who maintains a twelve-month place or places of residence in Ohio, who is qualified as a resident to vote in Ohio and receive state welfare benefits, and who may be subjected to tax liability under Section 5747.02 of the Revised Code, provided such person has not, within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.

2. "Financial support" as used in this rule, shall not include grants, scholarships, and awards from persons or entities which are not related to the recipient.

3. An "institution of higher education" as used in this rule shall mean any university, community college, technical institute or college, general and technical college, medical college or private medical or dental college which receives a direct subsidy from the state of Ohio.

4. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, "domicile" is a person's permanent place of abode; there must exist a demonstrated intent to live permanently in Ohio, and a legal ability under federal and state law to reside permanently in the state. For the purpose of this policy, only one (1) domicile may be maintained at a given time.

5. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, an individual's immigration status will not preclude an individual from obtaining resident status if that individual has the current legal status to remain permanently in the United States.

### C. Residency for subsidy and tuition surcharge purposes

The following persons shall be classified as residents of the state of Ohio for subsidy and tuition surcharge purposes:

1. A dependent student, at least one of whose parents or legal guardian has been a resident of the state of Ohio for all other legal purposes for twelve consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.

2. A person who has been a resident of Ohio for the purpose of this rule for at least twelve consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and has not directly or indirectly received in the preceding twelve consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.

3. A dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment and established domicile in the state of Ohio for reasons other than gaining the benefit of favorable tuition rates.

Documentation of full-time employment and domicile shall include both of the following documents:

- a sworn statement from the employer or the employer's representative on the letterhead of the employer or the employer's representative certifying that the parent or spouse of the student is employed full-time in Ohio.
- a copy of the lease under which the parent or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the parent or spouse is the owner and occupant; or if the parent or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the parent or spouse resides at that residence.

### D. Additional criteria which may be considered in determining residency for the purpose may include but are not limited to the following:

- Criteria evidencing residency:
  - if a person is subject to tax liability under Section 5747.02 of the Revised Code;
  - if a person qualifies to vote in Ohio;
  - if a person is eligible to receive state welfare benefits;
  - if a person has an Ohio driver's license and/or motor vehicle registration.
- Criteria evidencing lack of residency:
  - if a person is a resident or intends to be a resident of another state or nation for the purposes of tax liability, voting, receipt of welfare benefits, or student loan benefits (if the student qualified for that loan program by being a resident of that state or nation);
  - if a person is a resident or intends to be a resident of another state or nation for any purpose other than tax liability, voting, or receipt of welfare benefits. (See paragraph 2., a. of this rule.)

**E. Exceptions to the general rule of residency for subsidy and tuition purposes.**

1. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for these purposes.
2. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.
3. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.
4. A person who is transferred by his employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile as long as such person has fulfilled his or her tax liability to the state of Ohio for at least the tax year preceding enrollment.
5. A person who has been employed as a migrant worker in the state of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.

**F. Procedures**

1. A dependent person classified as a resident of Ohio for these purposes under the provisions of paragraph (C) (1) of this rule and who is enrolled in an institution of higher education when his or her parents or legal guardian removes their residency from the state of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic degree program.
2. In considering residency, removal of the student or the student's parents or legal guardian from Ohio shall not, during a period of twelve months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph (C) (1) or (C) (2) of this rule.
3. For students who qualify for residency status under residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside Ohio less than twelve months after accepting employment and establishing domicile in Ohio.
4. Any person once classified as a nonresident, upon the completion of twelve consecutive months of residency, must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident.

Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of documentation regarding the sources of a student's actual financial support.

5. Any reclassification of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification.

6. Any institution of higher education charged with reporting student enrollment to the Ohio Board of Regents for state subsidy purposes and for assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of his or her Ohio residency for purposes of this rule. Such an institution may require the submission of affidavits and other documentary evidence which it may deem necessary to a full and complete determination under this rule.

**UNDERGRADUATES TAKING GRADUATE COURSES**

**NOTE:** Except for students in the Honors Tutorial Program and students who meet the conditions specified below, no undergraduate may take a graduate course for credit.

**Senior for Graduate Credit.** An Ohio University student, or other well-qualified senior attending another university, who is within nine hours of completing all requirements for the bachelor's degree may be eligible for graduate study as a senior. The student must have an overall grade-point average of at least 2.5 and secure a written recommendation from the dean of his or her undergraduate college and the graduate chair of the department, or departments, offering the graduate courses. Permission to take such courses does not constitute admission to a graduate degree program (see next section). The student admitted as a senior for graduate credit pays undergraduate fees and is not eligible for graduate associateship or graduate scholarship support. Request for this privilege should be made in advance of registration through the Office of Graduate Student Services. A \$10 application fee is charged for this privilege, and admission is normally granted for one quarter only.

**Early Admission to a Graduate Degree Program.** A superior undergraduate student may seek early admission to a graduate degree program. The student must have an overall grade-point average of at least 3.5 and must have completed all undergraduate requirements except the total credit-hour requirement by the time of entry into the graduate degree program. After securing the written recommendation of the student's department, the departmental graduate committee, and the dean of his or her undergraduate college, the student may be admitted into a graduate degree program and may enroll in graduate courses for graduate credit. These courses can be used to satisfy both undergraduate and graduate degree requirements. Application for this privilege must be made in advance of registration through the Office of Graduate Student Services. Students who qualify for early admission to a graduate degree program are eligible for graduate associateships or scholarship support.

**PRECOLLEGE ORIENTATION AND REGISTRATION**

Ohio University conducts a precollege orientation and registration program for new fall quarter students during the summer months.

Fall quarter freshmen and transfer students are expected to visit the campus during July or August for a two-day session of orientation, academic advising, and course registration. Parents are encouraged to attend these sessions in which they will have an opportunity to discuss many of the concerns they may have about the college experience.

Orientation and registration programs for new students entering the University other than fall quarter will be conducted immediately prior to the beginning of each quarter.



Detailed information concerning student orientation and registration is sent to all admitted students from the University College Office.

## REGISTRATION FEES

Undergraduate registration fees are payable at the Cashier's Office\* prior to the opening of classes and in accordance with instructions issued with registration materials. Checks and money orders should be made payable to Ohio University in the exact amount of the fees. It is important that the student retain all fee receipts.

Payment of fees owed is a prerequisite to official enrollment, and all students should have sufficient funds to cover these expenses. Post-dated checks will not be accepted. Checks issued to the University and not paid on presentation to the bank will automatically cancel any receipts given and result in the assessment of penalties.

Ohio University reserves the right to make, without prior notice, any fee adjustments that may become necessary.

\*Regional campus students pay fees at the campus where they are registered. For graduate fees see the *Graduate Catalog*.

## Adult Learning Service

Per assessment (courses 1-6 hours) .....	96.00
Administration fee .....	35.00

## Miscellaneous Fees

Room (standard double occupancy) .....	\$595.00
Board (full 20 meals per week) .....	616.00
Admission application filing fee (nonreturnable) .....	25.00
Special student application fee (nonreturnable) .....	15.00
Reclassification fee from special student to regular student status .....	10.00
Change of class schedule .....	4.00
Duplicate official forms, fee receipts, grade reports, etc. ....	2.00
Course Credit by Examination, each quarter hour .....	24.00
Graduate application for degree	
Associate .....	8.00
Bachelor's .....	16.00
Master's .....	23.00
Doctoral .....	50.00
Reapplication .....	5.00
Health Insurance, annual premium .....	200.00
Late registration and/or payment (per week) .....	20.00
Orientation & testing fee .....	50.00
Returned check service charge (accumulative) .....	5.00
Transcript of record .....	2.00
Placement registration fee .....	20.00

## SCHEDULE OF UNDERGRADUATE FEES\*

\*Subject to change

### Instructional Fees (per quarter)

Comprehensive fee for load of 11 to 20 hours inclusive

	Resident of Ohio	Nonresident
Athens campus .....	\$982.00	\$2,097.00
Regional campuses .....	794.00	1,909.00
Ironton Branch and Portsmouth Resident Credit Center .....	733.00	765.00

Includes the instruction fee, the general fee, and other special services (such as health, library, and testing), and course and laboratory fees. Excludes special-course fees for instruction as in music and bowling, which are listed in the quarterly *Schedule of Classes*.

Extra fee for each quarter hour in excess of 20 hours

Athens campus .....	\$ 49.00	\$104.00
Regional campuses .....	38.00	95.00
Ironton Branch and Portsmouth Resident Credit Center .....	38.00	43.00

Fee for each hour for load of 1 to 10 hours, inclusive

Athens campus .....	\$ 96.00	\$206.00
Regional campuses .....	74.00	188.00
Ironton Branch and Portsmouth Resident Credit Center .....	67.00	70.00

Auditors pay fees in full as above.

### Lifelong Learning

Independent Study courses, each quarter hour .....	\$ 44.00
Independent Study projects, each quarter hour .....	51.00
Course Credit by Examination, each quarter hour .....	24.00
External Student Status .....	100.00
Yearly matriculation fee .....	65.00
External Student Program for the incarcerated, comprehensive fee, per quarter .....	910.00

## REFUND OF FEES

The official University policy on the refund of registration fees is: (1) Official withdrawal from the University prior to the first day of classes entitles the student to a refund of 100 percent. (2) Withdrawal from the University during the first 14 days of the quarter (see the academic calendar) entitles the student to a refund of 80 percent (cost of 20 percent) if fees were paid in full. Students on the Monthly Payment Plan will have incurred a charge of 20 percent of registration fees with this being subtracted from their registration payments to determine refundable amount. (3) Withdrawal from the University after the first 14 days of classes entitles the student to no refund. (4) Any student withdrawing from the University while owing the University money is considered to be indebted to the University for that amount.

Students dropping hours by change order prior to or during the first 14 days of the quarter, when such changes result in a reduction of fees, are entitled to receive a 100 percent refund of the reduction. Changes made after the 14th day of the quarter will result in no refund.

Refunds are issued 30 days after the date of withdrawal from the University.

Questions about the above items should be referred to the Registrar's Office.

## MONTHLY PAYMENT PLAN

A monthly payment plan is available to full-time students (undergraduate over ten hours; graduate over eight hours) on the Athens campus. The plan equalizes the academic year's fees into nine monthly payments with the first pay-

ment due on August 9.

Students are charged a \$30 nonrefundable fee to apply for enrollment in the plan. This plan is not a loan program and there is no interest charge.

The refund procedure is based on the logic that all fees for the quarter have been paid. The refundable amount will be adjusted to recognize any unpaid monthly payments for the current quarter.

Contact the Cashier's Office, Chubb Hall, to obtain an application for the Monthly Payment Plan.

## Registration and Procedures

### REGISTRATION

Details concerning the registration procedure are printed each quarter in the *Schedule of Classes* and may be obtained at the Registrar's Office in advance of each registration.

In accordance with regulations a student currently in attendance at the University may preregister for a subsequent quarter.

New and former undergraduate students will receive registration information by mail with other orientation material.

### Identification Card

All students, when they register, will be issued an identification card by the Registrar's Office, 150 Chubb Hall. This card, when validated at registration, gives students access to campus services, including, among others, the meal plan, library privileges, and health services through Hudson Health Center.

The card is issued free of charge according to these guidelines:

1. New students or re-enrolling students who are returning after one year of absence will be issued a card free of charge.
2. Students whose name or social security number has changed will be issued a new card free of charge providing they turn in their old card when the new one is issued.

The Registrar's Office will charge a fee for replacing the card according to these guidelines:

1. A \$9 fee will be charged to replace a card lost within one year of the last quarter of enrollment.
2. A \$4 fee will be charged to replace a damaged card if the damaged card is returned when the new card is issued. Otherwise the \$9 fee will be charged for replacement.
3. A \$9 fee will be charged for a new card containing name or social security number changes ONLY if the old card is unavailable. If the old card is turned in when the new card is issued, no fee will be assessed.

### Student Load

All full-time students, including those on probation, will usually carry a normal load of 16-20 quarter hours.

Students who schedule fewer than 11 credit hours (12 for financial aid recipients) will be considered part-time for the effective quarter.

**Veterans Benefits.** Undergraduate students who are receiving veterans benefits must register for at least 12 quarter hours of classroom sessions per week for full benefits to be awarded. Graduate students must register for at least nine quarter hours of graduate work to receive full benefits. For more information about veterans benefits, contact the Veterans Coordinator, 110 Chubb Hall.

## Auditing and Visiting Privilege

Courses to be audited must be marked "audit" on registration forms. Questions about auditing should be referred to the student's college office. Changes from audit to credit or from credit to audit are made by change order during the first 14 calendar days of the quarter.

If a student does not meet the instructor's requirements for auditing the course, the instructor may remove the course from the student's registration.

With the permission of the instructor, a full-time student has the privilege of visiting classes in which he or she is not registered.

## Classification of Students

A student who has been admitted to the University and who expects to pursue a degree course is given rank according to the number of quarter hours earned: freshman, 0-44; sophomore, 45-89; junior, 90-134; and senior 135 and over.

## CHANGE PROCEDURES

### Change of Class Schedule

A student who finds it necessary to add a course, drop a course, or correct his or her registration secures a change order in the office of the dean of the college in which he or she is enrolled. A fee of \$4 is charged for each change order processed after the 14th calendar day of the quarter.

**Adds.** A course may be added only during the first 14 calendar days of the quarter and only with the permission of the instructor or departmental representative designated by the instructor. The departmental representative or the instructor approves adding a course by initialing the change order. After securing the approval, the student presents the change order form for the dean's approval. For information concerning fee changes, see the *Schedule of Undergraduate Fees* in this catalog.

**Drops.** Students may drop any course through the fifth week (defined for the purpose of this policy as the 35th calendar day) of a term. The completed change order must be turned in by the student to the appropriate academic dean's office on or before the fifth week. After the end of the fifth week and before the last class day of the quarter, a student may petition his or her dean in writing requesting to drop under special circumstances. Earning a low grade in the course is not to be considered such a circumstance.

A student who drops a course during the first two weeks (first 14 calendar days) will have no record of that course on the transcript.

For any student who drops a course after the 14th day of the quarter the instructor will assign a grade of WP or WF, indicating that the student was performing work considered passing (WP) or failing (WF) at the time the course was dropped. This grade will be awarded at the end of the quarter, at which time the name of each student who has dropped a course will appear on the grade sheet.

Students dropping hours by change order prior to or during the first 14 days of the quarter, when such changes result in a reduction of fees, are entitled to receive a 100 percent refund of the reduction. Changes made after the 14th day of the quarter will result in no refund.

However, if a student is receiving financial assistance, the change in enrollment status may result in the student's having to repay those programs from which he or she received student financial assistance.

A student denied permission to drop a course may appeal the decision through the appropriate grievance procedure. (See the *Student Handbook*.)

## Change of Student Personal Information

All changes of student personal data must be reported to the Registrar's Office, Chubb Hall. Forms are available in the Registrar's Office or the office of the student's dean. Changes of name, social security number, and/or birth date must have a document verifying the correct information at the time the request is made.

Forms for reporting a change of home or Athens address are available in the Registrar's Office. *The student is responsible for any University office communication sent him or her at the last address reported to the Registrar's Office, Chubb Hall.*

## Change of College

Application for transfer from one degree college to another is made in the office of the dean of the college in which the student would like to be admitted. The change must be signed by the two deans concerned within the first 14 days of the quarter or the student remains enrolled in the initial college. A student must fulfill degree requirements for the college to which he or she transfers.

## LATE REGISTRATION AND LATE PAYMENT POLICY

Unless in the judgment of the registrar a student's registration has been delayed due to the convenience of the University, a late-registering student will be charged a late registration fee beginning with the second calendar week of each quarter.

The late fee is \$20 the second week, \$40 the third week, \$60 the fourth week, \$80 the fifth week, and \$100 the sixth week.

The last day to register with a late fee is the Friday of the sixth calendar week of the quarter.

A late payment fee normally would not be applicable since payment is a prerequisite to registration. However, in addition to other service charges, a \$20 late payment fee will be assessed by the Bursar's Office on all checks returned by a bank after the payment deadline has passed.

## WITHDRAWAL FROM THE UNIVERSITY

Application for withdrawal is made on a withdrawal form obtained in the office of the dean of the college in which the student is enrolled. When the request for the withdrawal has been approved by the dean of the college, the withdrawal is referred to the Registrar's Office, Chubb Hall, which grants an official withdrawal after it has been determined that all obligations to the University have been met. A refund of registration fees is made according to regulations under the Refund of Fees section.

If a student is receiving financial assistance, the change in enrollment status may result in the student's having to repay those programs from which he or she received student financial assistance.

## TRANSCRIPTS

A copy of a student's record is issued by the Registrar's Office, Chubb Hall, as an official transcript. Transcripts are made only upon written request, with a \$2 charge for each copy. The transcript carries a statement of good standing. A student on scholastic probation has such status shown on the transcript.

Unmet University financial obligations, or pending disciplinary cases, may result in a hold being placed on a student's academic record. A transcript will not be sent until the hold is cleared by the initiating office.

## REPLACEMENT DIPLOMA

A notarized affidavit, attesting that the original diploma has been lost or destroyed, or a copy of a court order verifying a legal name change, or a copy of the official marriage certificate must be filed with the Registrar's Office at Ohio University. In case of a legal name change the original diploma must be returned.

Each affidavit requesting a replacement diploma must be accompanied by a \$15 fee.

The replacement diploma will carry current titles and signatures of University officers. It will carry the notation "official replacement." Students should allow ten weeks for delivery.

# Credit and Grading

## CREDIT AND FINAL EXAMINATIONS

All credit is designated in quarter hours. Normally, a quarter hour is the equivalent of one recitation or two or more laboratory periods a week throughout a quarter.

The final examinations are held during the last week of a session, and all students are required to take the examinations according to the schedule issued by the Registrar's Office, that is, if a final examination is required for that course.

The final examination for honors work must be taken before the opening of the regular examination period. For information concerning honors work, refer to the departmental Honors Program.

## GRADING SYSTEM AND REPORTS

At the close of a session or upon the completion of a course an instructor reports a letter grade indicating the quality of a student's work in the course. Once grades are submitted they are final and cannot be changed unless evidence of error can be presented. *Grades cannot be changed by arranging to do additional work.* Points are assigned for each quarter hour of credit earned, according to the following grading system:

A .....	4.00	B- .....	2.67	D+ .....	1.33
A- .....	3.67	C+ .....	2.33	D .....	1.00
B+ .....	3.33	C .....	2.00	D- .....	0.67
B .....	3.00	C- .....	1.67	F .....	0.00

**CR . . . Credit.** In addition to the letter grades a report of credit may be made. This is credit without a grade. Credit is added to the hours earned, but not added to the hours attempted for point-hour calculation. Credit is to be used for certain courses and only by prior approval of the Curriculum Council or in certain special cases by the dean of the college.

**PR . . . Progress.** The PR is awarded only in graduate courses and undergraduate courses specifically designated by the department with the approval of the college dean. It indicates the student has made progress in the course in which he or she is registered but has not finished the work required for releasing a letter grade. Progress may extend longer than one quarter. It is not calculated in the grade-point average.

**I . . . Incomplete.** The student has not finished the work required to receive a grade. It is not counted in the grade-point average. Unless it is changed within the first six weeks of the next quarter enrolled, the I converts to F (an extension of time may be requested to run to the end of the quarter).

When the student applies for graduation any incomplete grades on his or her record will be calculated as F grades for purposes of determining eligibility for graduation. If the I is not completed within six weeks after graduation, the grade will convert to F.

**WP/WF . . .** Withdrawal/Pass or Fail. Designation for a course dropped after the 14th day of the quarter.

The above four grades do not count in the grade-point average.

Other reports which will appear on the student's grade slip but which are not assigned by a faculty member:

**AU . . .** Audit. A student registering for *Audit* is expected to attend classes consistent with the instructor's attendance policy. Failure to do so will result in removal of the audit from the student's record. If this action results in a change of fees, the official University policy of refund of registration fees will be applied. Audited courses are not computed in the grade-point average or hours earned.

**I\* . . .** Administrative Incomplete. Given to a student who initially registers for a course but does not officially drop that course by change order. The I\* is given by the Registrar's Office and may be removed in accordance with rules established by the student's college. Until removed, an administrative incomplete will be computed as an F in the calculation of the grade-point average.

**NR . . .** No Report. The instructor left the grade blank on the grade report. The NR may be the result of a faculty member assigning a grade for which the course is not coded as legitimate, or because grades were turned in too late to be processed.

**P . . .** Pass. Conversion of grades A through D- under the pass/fail option. The fail (F) grade counts in the grade-point average the same as any F grade.

A course for which graduation credit is not allowed or a course which has been repeated will appear on the transcript with double asterisks (\*\*) on the same line as the course. An explanation at the bottom of the transcript will state:

\*\*Not counted toward graduation. Hours and points not included in totals for scholastic average.

This action occurs only after a form has been properly submitted by the student and approved by his or her college office.

## Repeating a Course

When a course is repeated, both grades continue to be used to determine the accumulative grade-point average until the student applies for and completes a repeated-course form, available in the office of the dean. The repeated course form removes the effect of the earlier grade and retains the later grade, even if the later grade is lower than the earlier. Course credit hours duplicated by repetition of coursework are not accepted toward the credit hour requirement for graduation. As a rule, a course may not be repeated for the purpose of raising the grade-point average after completion of higher-level coursework in the same subject area. Note also that courses taken at Ohio University and repeated at another university are not eligible for removal under this policy.

## Pass/Fail Option

The pass/fail option is designed to encourage students to explore areas of study which they might otherwise hesitate to enter. It must be initiated by the student.

To be eligible for the pass/fail option, a student must

have earned an average of 2.5 or better for his or her latest quarter of full-time enrollment, or have an accumulative average of 2.0 or better. First-quarter freshmen will be considered as having met the above requirement.

The pass/fail option is subject to the following restrictions: (1) Students may complete up to 20 quarter hours under this option; (2) A student may take only one course per quarter by pass/fail; and (3) No course taken pass/fail may be used to fulfill any graduation requirement (college, school, or departmental) other than the total-hours requirement. For example, courses taken pass/fail cannot be used to satisfy distribution requirements, 90-hour requirements of courses above a specified level, a specific course established as a requirement for majors in a departmental major program, or any other such requirements. (4) The student must complete the Pass/Fail Application Form and turn it in to his or her dean's office by the 14th calendar day of the quarter. No change can be made after this time. (5) The professor is not to know who elects his or her course on the pass/fail option. A grade will be turned in at the regular grade-processing time and will be converted to a P or F on the transcript. The grade cannot be retrieved.

## Point-Hour Ratio (Grade-Point Average)

The basis for determining scholastic standing is the point-hour ratio or grade-point average (g.p.a.). It is obtained by dividing the total number of points earned by the total number of quarter hours of credit attempted.

## Transfer Credit Evaluation and Recording of Transfer Credit

For details of credit evaluation for all prospective students, see the Admission and Fees section of this catalog.

## Segmented Transcript Policy for Undergraduates

An undergraduate student who has re-enrolled in the University during fall 1985 (9/11/85) or later, after an absence of six or more years, may petition the dean of his or her academic college to have the transcript segmented. If the petition is approved, all courses will remain on the record, but the grades earned earlier will be removed from the cumulative grade-point average, while the hours earned will be carried forward.

Subsequent gaps of six or more years will not, however, result in further segmentation of the student's record.

The following provisions are also a part of this policy:

1. A student must be re-enrolled and complete a minimum of 48 quarter credit hours and three academic quarters of coursework at Ohio University before graduation.
2. The new grade-point average will be used for determining probationary status and liability of being dropped. (See current *Undergraduate Catalog*, Probation and Drop Regulations.)
3. The grade-point average for determining honors at graduation will be based on all hours attempted at Ohio University, including those before segmentation.
4. The grade-point average for determining the two-point minimum grade-point average for graduation overall and in the major will be based on all hours attempted at Ohio University, including those attempted before segmentation.
5. The grade-point average used for consideration for entrance to academic programs and eligibility for scholarships and honor societies will be determined by the relevant officials or committees; they may at their discretion use both current and previous grade-point averages or only the new grade-point average.

Students interested in the Segmented Transcript Policy can find further information and application forms at their college office.

## Continuing Education Unit

Participants in designated noncredit courses may be awarded continuing education units (CEUs). The CEU is a measurement (one unit per ten class contact hours) nationally recognized by business, industry, and professional organizations for an individual's efforts toward professional growth. Permanent records of CEUs earned are kept in the Office of Lifelong Learning, which, upon request, will provide a copy of an individual's record.

## Dean's List

The Dean's List, compiled at the close of each quarter, includes the names of all students who have point-hour ratios of at least 3.3 on a minimum of 16 quarter hours of credit earned, including 12 hours attempted for letter grades.

## PROBATION AND DROP REGULATIONS

### Review of Records

The University requires a student to maintain an accumulative grade-point average (a.g.p.a.) of at least 2.0. For this purpose each full-time student's record is reviewed at the close of each quarter. For part-time students the review takes place at the close of the quarter in which the accumulative number of hours of enrollment since the last review exceeds ten.

### Probation

Students who, at the time of review, do not have the required 2.0 minimum a.g.p.a. will be placed on probation or, if already on probation, will either be continued on probation or dropped from the University.

### Removal of Probation

Removal of probationary status for a full-time student is automatic at the close of each quarter when a student's a.g.p.a. rises to 2.0 or above.

### Continued Probation

A student already on probation who does not qualify for removal may continue until the next review if, in the opinion of the dean, adequate progress towards attaining an a.g.p.a. of 2.0 has been made. The number of times a continuance can be granted is limited to three; thus for full-time students there is a limit of four consecutive quarters on probation.

### Dropped from the University

If denied continuation of probation (see above), a student will be dropped from the University.

A student who is dropped may not enroll for regular courses on any Ohio University campus. If the student successfully completes work at other institutions, the credit may be accepted upon re-enrollment at the discretion of the dean.

## Reinstatement

A student who has been dropped from the University may petition the dean of his or her college for reinstatement.

Normally a petition for reinstatement will not be considered until 12 months after the student was dropped.

A student who has been dropped for a second time is reinstated only under extraordinary circumstances, and then not until 24 months after the student's second dismissal.

As a condition for reinstatement, it is possible for a dean to suggest certain remedial steps to be taken by the student usually in the form of courses to be taken at other institutions or through study by correspondence or course credit by examination. However such steps will not constitute sufficient grounds for waiving or shortening the waiting period for reinstatement.

## Deficiency Points

When a student's accumulative grade-point average is below 2.0, the grade report shows the number of *deficiency points*. The deficiency points are determined by multiplying the total number of hours attempted by two and subtracting from this all points earned. For example, if a student has attempted 40 hours and has earned 65 points, the deficiency is 15. That is,  $40 \times 2$  (the grade-point average required for graduation) equals 80 minus 65 points earned equals 15 deficiency points. Thus the number of deficiency points can be reduced by subsequent work for which the quarterly average is above 2.0.

Generally a student is considered to have made adequate progress towards removal of probation if the number of deficiency points has been reduced at a rate consistent with the removal of all deficiency points within the prescribed period (maximum four quarters for full-time students).

## College Standards

In addition to the University minimum standards given above, some colleges maintain higher standards of performance in professional courses or other required work within the college. A student dropped from the college because of failure to meet such additional standards, but who is not subject to dismissal according to the University rules presented here, is still eligible for admission to other programs in the University. Otherwise, a student dropped by a college is considered to be dropped by the University and cannot apply for admission to another college without first being reinstated.

## Academic Misconduct

Academic misconduct includes cases of cheating and plagiarism. Cheating implies dishonesty or deception in fulfilling academic requirements. A faculty member has the authority to grant a failing grade in cases of academic misconduct as well as referring the case to the director of judiciaries. The director of judiciaries, the University Hearing Board, and the University Appeal Board have the authority to take formal action against a student including, but not limited to, suspension or dismissal from the University. However, the director of judiciaries, the University Hearing Board, and the University Appeal Board have no authority to modify a grade given by a faculty member.

Dishonesty occurs in instances of furnishing false information to the University by forgery, alteration, or misuse of, among other things, University documents or records, furnishing the University a false written record or false oral statement, or furnishing false identification to a University official.



Plagiarism can take many forms, but in essence it involves the presentation of some other person's work as if it were the work of the presenter. This kind of deception has no place in the academic world.

Plagiarism, a form of academic misconduct, will not be tolerated within the Ohio University community. Whenever plagiarism takes place, as determined by the judgment of a faculty member, or by the procedures of the Office of University Judiciaries, serious action will be taken against the student committing plagiarism. Such action may be failure of work undertaken; failure of the course; censure by the faculty member, department, or college involved; and/or formal action by the Office of University Judiciaries, which can include suspension or dismissal from the University.

Whenever formal action is taken with respect to plagiarism, the student(s) involved, the faculty member, the department chair, and the student's dean should be notified of the action.

It is appropriate for each faculty member to point out each quarter, among the several introductory items of business related to the course, the nature of plagiarism and the range of punishments pertaining to such an offense.

If a student's course grade is lowered by an instructor who has accused the student of plagiarism, and if the student wishes to appeal this grade, he or she may follow the usual appeal route through the instructor, chairperson, and dean. If satisfaction is not achieved through this process, the appeal may be taken to the Student Grievance Board.

If a student wishes to appeal an action of the University Judiciaries or the University Hearing Board, such as suspension or expulsion, he or she appeals to the University Appeal Board.

## CLASS ATTENDANCE POLICY

Each instructor will state his or her policy during the first week of classes each quarter.

## Instructor's Attendance Reports

A student who misses the first two contact hours of a course for which he or she is registered may be denied permission to remain in the class. The student who has missed the first two contact hours should verify his or her status in the class with the instructor. The instructor has the option of dropping or retaining the student. Students not retained because of missing the first contact hours must process a change order to adjust their schedules. Failure to process the change order can result in an F or I\* grade.

Instructors are encouraged to report to the office of the dean of the appropriate college the names of students who are frequently absent. This enables the staff to investigate such cases and to determine what assistance these students may need in dealing with problems outside the classroom.

## Notification of Causes of Absence

Under certain conditions a notification of absence enabling a student to make up work may be obtained from the appropriate office as indicated below. The following rules apply:

1. When a student has participated in an authorized University activity (a departmental trip, music, or debate activity, etc.) the notification should be issued by the sponsoring office.
2. A student absent from class due to hospitalization as an inpatient in O'Brien Memorial Hospital is NOT issued

a notification of class absence. However, the student may request that the instructors call Hudson Health Center to verify the student's hospitalization on certain days.

3. A student who receives medical or dental care as an outpatient at the Hudson Health Center will not be issued a notification of class absence. However, the student may request the instructors to call the center (the attending physician, if possible) to verify outpatient care on a given day. It is assumed that students visiting the health center as outpatients will do so, whenever possible, without missing classes.
4. A student who receives medical care from health care personnel or facilities other than Student Health Service is expected to present the instructors with verification of the date(s) such care was received.
5. Instructors are urged to assist, without prejudice, students returning to a class after a legitimate absence. In cases of legitimate absence — such as illness, death in the immediate family, religious observance, involvement in University-sponsored activities — makeup work will be arranged subject to the following limitations if previously announced by the instructor. There are occasions when the size or nature of the course make it necessary to set limits on the number of excused absences or the availability of makeup work, particularly for examinations or special events such as field trips or outside speakers. Such limitations will be explained in the instructor's statement of attendance policy at the beginning of each course. *Students with scheduled activities must check with the instructor as early as possible to clarify that there will be no conflict with the policy.*

## STUDENT ATHLETES

### Minimum Academic Progress

Eligibility for regular-season competition subsequent to the student athlete's first academic year in residence or after the student athlete has utilized one season of eligibility in a sport shall be based upon: (1) the satisfactory completion, prior to the beginning of each fall quarter, of an accumulative total of quarter hours of academic credit acceptable toward a baccalaureate degree in a designated program of studies, which is equivalent to the completion of an average of at least 12 quarter hours during each of the previous academic terms in academic years in which the student athlete has been enrolled; or (2) satisfactory completion of 36 quarter hours of acceptable degree credit since the beginning of the student athlete's previous fall quarter.

The calculation of credit hours shall be based on hours earned or accepted for degree credit in a specific baccalaureate degree program for the student athlete. Hours earned after the regular academic year (e.g., hours earned in summer school) may be used to satisfy academic requirements of the above regulation. (NCAA Bylaw 5-1-(j)(6)(ii).)

## Student Records Policy

### UNDERLYING PRINCIPLES

Ohio University's commitment to its educational mission and to the students and society it is obligated to serve demands that it maintain various records. No education records will be maintained that are not directly related to

the basic purposes of the University. All policies and practices governing the collection, maintenance, review, and release of records will be based upon the principles of confidentiality and the student's right to privacy, consistent with the Family Educational Rights and Privacy Act of 1974. This policy shall govern the collection, maintenance, review, and release of student records on the Athens and regional campuses of Ohio University.

A student is herein defined to mean any person for whom the University maintains education records or personally identifiable information, but does not include a person who has not been in attendance at the University or any of its regional campuses.

## **TYPES OF RECORDS**

The University recognizes two general types of records: education records and unofficial records.

### **a. Education Records**

Education records are those records which are directly related to a present or former student in any form (e.g. print, electronic, microfilm, etc.), which contain information directly related to a present or former student, and which are maintained by the University or by a person acting for the University. Education records shall be subject to the principles regarding collection, maintenance, review, and release which are described below:

Education records include, but are not limited to, the following:

1. Admissions records maintained by the Office of Admissions, the College of Osteopathic Medicine, and the Office of Graduate Student Services. The director of admissions, the dean of the College of Osteopathic Medicine, or the associate provost for graduate and research programs are the official custodians of these records;
2. Academic records maintained by the dean of the student's college; academic departments; the Registrar's Office; and the Office of Lifelong Learning. The registrar, the deans of the colleges, or the chairpersons of the departments are the official custodians of these records;
3. Disciplinary records maintained by the University Judiciaries. The director of Judiciaries is the official custodian of these records;
4. Financial aid and student employment records maintained by the Office of Student Financial Aid and Scholarships. The director of the Office of Student Financial Aid and Scholarships is the official custodian of these records;
5. Placement records maintained by the Office of Career Planning and Placement. The director of Career Planning and Placement is the official custodian of these records;
6. Housing records, including contract and lease agreements, maintained by the Housing Office. The director of Housing is the official custodian of these records;
7. Financial records by offices which initiate, collect, and record fees assessed and paid;
8. International student records. The director of International Student and Faculty Services is the custodian of these records;
9. Any and all other records not specifically designated as unofficial records under subsection b., maintained by a University office or agency as essential to fulfilling the basic purpose and responsibility of the office or agency. The University official responsible for that office or agency is the official custodian of these records.

### **b. Unofficial Records**

Unofficial records include:

1. Records of institutional, supervisory, and administrative personnel, and faculty and educational personnel ancillary thereto which are in the sole possession of the maker thereof and which are not accessible by or revealed to any other person except a substitute. A substitute means an individual who performs on a temporary basis the duties of the individual who made the record and does not refer to an individual who permanently succeeds the maker of the records in his or her position;
2. Records and documents of University Security, provided that the records and documents are kept apart from the records described in subsection a. of this section, which are maintained solely for law enforcement purposes, and which are not available to persons other than law enforcement officials of the same jurisdiction or other University law enforcement personnel;
3. In the case of persons who are employed by the University but who are not in attendance, records made and maintained in the normal course of business which related exclusively to such person in his or her capacity as an employee and which are not available for use for any other purpose;
4. Records which are created or maintained by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional acting in his or her professional capacity, and which are created, maintained, or used only in connection with the provision of treatment to the student, and which are not available to anyone other than persons providing such treatment; provided, however, that such records can be personally reviewed, upon written notice by the student, by a physician, or by other appropriate professional of the student's choice;
5. Directory Information, including the student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, most recent previous educational agency or institution attended by the student, and other similar information; subject, however, to the limitation stated under the Release of Student Records section below.

## **MAINTENANCE OF RECORDS**

Education records shall be maintained only by University administrative personnel assigned responsibility for each of the types of records listed in the Types of Records section above. All University personnel involved in the handling and maintenance of education records shall be instructed concerning the confidential nature of such information and their responsibilities regarding it, pursuant to this policy and the Family Educational Rights and Privacy Act of 1974. This instruction should be a part of each office's orientation procedure.

## **PERSONS AUTHORIZED TO PLACE MATERIALS IN RECORDS FILES**

Only the following qualified persons are permitted to place information in an education records file: personnel in the office or agency responsible for maintaining the files, and the individual student or others at the request of and, therefore, with the consent of the student.

## CHALLENGING OR REMOVING FILE CONTENTS

A student has the right to a formal hearing, pursuant to and in compliance with sections 99.20 through 99.22 of the Regulations to the Family Educational Rights and Privacy Act of 1974, to challenge the content of such student's education records in order to ensure that the records are not inaccurate, misleading, or otherwise in violation of the privacy or other rights of students, and to provide an opportunity for the correction or deletion of any such inaccurate, misleading, or otherwise inappropriate data contained therein, and to insert into such records a written explanation respecting the content of such records.

However, the student shall first attempt to informally resolve his or her grievance through the department chair, dean of his or her college, or, in the case of other records, through the administrative officer responsible for maintaining the records. The office responsible for maintaining the records may charge a reasonable fee, but not more than \$2 per page, for the reproduction of the records. The department chair, dean, or administrative officer, after careful review of the facts surrounding the challenge, shall inform the student, in writing and within five (5) days after the student presents the challenge, of his or her decision and any corrective action that will be taken.

If the student is dissatisfied with the results of his or her informal challenge through the department chair, dean, or administrative officer, he or she shall then file a formal complaint.

## STUDENT ACCESS TO RECORDS

A student who is or has been in attendance at Ohio University shall have the right to inspect and review the contents of his or her education records, subject only to reasonable arrangements concerning time, place, supervision, and cost of reproduction of the records; but in no case shall the time be more than thirty (30) days after a request has been made. Costs of each reproduction shall not be greater than \$2 per page. Exceptions to this general right of review are:

- a. Confidential financial records of the student's parents or any information contained therein;
- b. Confidential letters and statements of recommendation, which were placed in the education records prior to January 1, 1975, as long as such letters or statements are not used for purposes other than those for which they were specifically intended, as determined by the administrative officer responsible for the office or agency where the record is kept;
- c. Unauthorized access to computer/electronic files;
- d. If the student has signed a waiver of the student's right of access under this section and the Family Educational Rights and Privacy Act of 1974, confidential recommendations respecting admission to any educational agency or institution, respecting an application for employment, or respecting the receipt of an honor or honorary recognition.

A student or a person applying for admission may waive his or her right of access to confidential statements described in subsection c. of this section, except that such waiver shall apply to recommendations only if the student is, upon request, notified of the names of all persons making confidential recommendations, and such recommendations are used solely for the purpose for which they were specifically intended. The student may revoke, in writing, the previous waiver of his or her right to access to confidential statements or recommendations. Such revocation shall only apply to confidential statements or recommendations placed in the record after the waiver has been revoked. Such waivers may not be required as a condi-

tion for admission to, receipt of financial aid from, or receipt of any other services or benefits from the University.

## RELEASE OF STUDENT RECORDS

Student records at Ohio University are held in trust by the University for the mutual benefit of the student and the educational mission of the University. Therefore, except with the prior written consent of the student, or as otherwise stated below, no information in any student education record file may be released to any individual or organization.

- a. Record-keeping personnel may have access to student education records according to the conditions stipulated in the Maintenance of Records section above.
- b. Members of the faculty and staff and other persons demonstrating a legitimate educational interest may have access to student education records for internal educational purposes or for necessary administrative and statistical purposes only. The legitimate educational interest will be determined by the University official responsible for the particular student's education record. Legitimate educational interest is used here in its traditional and classical sense. It means that, in order to serve students and the University, careful, considerate, and responsible judgments must be made by professional people who are responsible and accountable for these judgments. The rights of grievance and appeal are available to the student through the responsible official.
- c. Direct access to financial, medical, psychological, and placement files is limited to the professional and clerical staff responsible for those matters.
- d. The following information will be considered public and may be published in a University publication: the student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended by the student, and other similar information. Relative to such public or directory information, the University shall give public notice of the categories of information which shall be considered public information, and shall allow a reasonable period of time after such notice has been given for a student to inform the University that all of the information designated should not be released without the student's prior consent.
- e. Direct access to disciplinary files is limited to the staff of the Office of Judicial Affairs and the Office of Legal Affairs, and the dean of students and his or her immediate staff. This section shall not be construed so as to prohibit the Office of Legal Affairs from advising appropriate University offices that demonstrate a legitimate educational interest of the facts and disposition of a particular disciplinary case, nor shall it be construed so as to prohibit the Office of Judicial Affairs from advising any person demonstrating a need to know as to whether a disciplinary file does or does not exist.
- f. Medical and psychological information is legally confidential and privileged. It will not be released to anyone without the express written authorization of the individual involved. In such cases, the individual must designate what information is to be released and to whom that information is to be released.
- g. Notwithstanding the provisions of subsections a.-f. of this section:
  1. Education records will be released on compliance with a judicial order, or pursuant to any lawfully issued subpoena, upon condition that the student is reasonably notified of all such orders or subpoenas in advance of the compliance therewith by the University.



2. Records, or information from records containing personally identifiable information, may be made available to officials of other schools or school systems in which the student seeks or intends to enroll, upon condition that the student be notified of the transfer, receive a copy of the records if desired, and has an opportunity for a hearing to challenge the content of the record.
3. Records or information from records containing personally identifiable information may be released in connection with a student's application for, or receipt of, financial aid.
4. Records or information from records may be released to the parents of a dependent student, as defined in Section 152 of the Internal Revenue Code of 1954. The University presumes for this purpose only that all students are independent. The parents of a student have the burden to show dependent status as defined in Section 152 of the Internal Revenue Code of 1954.
5. Records or information from records may be released to the categories of persons or institutions designated in Section 438(b)(1)(C), 438(b)(1)(E) and 439(b)(3) of the Family Educational Rights and Privacy Act of 1974, and sections 99.30(a)(2), and 99.31 through 99.36 of the regulations thereto.
6. Records or information from records may be released to organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests; and administering student aid programs and improving instruction, if such studies are conducted in such a manner as will not permit the personal identification of students and their parents by persons other than representatives of such organization and such information will be destroyed when no longer needed for the purposes for which it was released.
7. Records or information from records may be released to accrediting organizations in order to carry out their accrediting functions.
8. Records or information from records may be released to appropriate persons if the knowledge of such information is necessary to protect the health or safety of the student or other persons.
9. The University officials responsible for implementing the Student Records Policy and ensuring compliance with the Family Educational Rights and Privacy Act of 1974 are the vice president for administration with the assistance of the dean of students and the director of legal affairs. The University ombudsman may examine all education records of a student upon authorization by the student or the director of legal affairs.

## **RECORD OF ACCESS**

Each office shall keep with the education records of each student a record which will specifically indicate the legitimate interest that each such person, agency, or organization, other than other school officials and persons designated in the Release of Student Records section above, has in obtaining this information. Such record of access shall be available only to the student, the school official, and his or her assistants who are responsible for the custody of such records, and to persons or organizations authorized to conduct an audit pursuant to the Family Educational Rights and Privacy Act of 1974. The record should include the name of the individual or agency requesting information, reason for the request, date of the request, and the disposition of the request. The office responsible for the records shall, upon a request in writing by the student, provide a copy of the records disclosed and charge the

appropriate fees therefore. Education records or information therefrom shall be transferred to a third party only on the condition that such party will not permit any other party to have access to such information without the written consent of the student.

## **RETENTION OF RECORDS**

Each record-keeping office will establish and make available a reasonable and justifiable policy regarding the retention of records after the separation of the student from the University. Where legal statutes govern retention, such policies shall be in accordance with those statutes.

## **HOLDS ON RELEASE OF RECORDS**

Unmet University financial obligations, or pending disciplinary cases, may result in a hold being placed on the release of student records. The office originating the hold must inform the student in writing that it has initiated such action. Copies of hold notices will be maintained by the originating office or agency and will serve as verification that written notification has been provided to the student.

## **INCORPORATION OF FEDERAL LAW**

The Family Educational Rights and Privacy Act of 1974, and the regulations enacted in pursuance thereof, are hereby incorporated by reference into this policy; and, to the extent that this policy conflicts with the law and/or regulations, the law and/or regulations shall take precedence.

# **Graduation Requirements**

## **APPLICATION**

A student who is a candidate for graduation must make application in the Registrar's Office and pay the application fee no later than the deadline listed in the academic calendar for the quarter in which graduation is planned. This application initiates the process which informs the student's college to check fulfillment of degree requirements. The process culminates with the entry of the college, major, degree, and date of granting the degree on the student's permanent (academic) record. The application fee for a bachelor's degree is \$16 and for an associate degree, \$8.

If an applicant fails to meet the requirements for graduation, he or she may reapply for the quarter in which completion of the requirement is planned. The fee for reapplication is \$5.

Students applying for a bachelor's degree must have a minimum of 192 quarter hours of credit with all college requirements met. The associate degree requires a minimum of 96 quarter hours.

## **SCHOLASTIC AVERAGE**

To meet the minimum standards for graduation from Ohio University, a student must have a point-hour ratio of 2.0 (C) on all hours attempted. The need for this 2.0 average applies to the student's total record and to the total major or equivalent as determined within the college.

## **MAJOR AREAS OF STUDY**

Requirements for majors and fields of concentration are outlined by the individual colleges. A transfer student who

has completed most or all of the courses in a major area of study at another institution may be required to satisfy the departments concerned about whether Ohio University academic standards in that area have been met.

### MINOR AREAS OF STUDY

While most programs do not require the completion of minor areas of concentration, a variety of minors is offered by several departments. In many cases, these minors may be completed even when the student is not enrolled in the college which offers that minor. Requirements for the available minors are explained in the Colleges and Curricula section of this catalog.

### DEVELOPMENTAL COURSE CREDIT

No more than eight credit hours earned in developmental courses may be applied toward the total hours required for graduation. Developmental courses shall be so designated and publicized by the curricular committees of the appropriate academic units.

### RESIDENCE REQUIREMENTS FOR GRADUATION

#### Bachelor's Degree

Residence credit is defined as credit earned by regular enrollment at Ohio University on the Athens campus, on any of the regional campuses, by any of the approved programs abroad, by any approved student teaching, by Independent Study and Course Credit by Examination arranged through Ohio University's Independent Study Program, by degree credit earned through continuing education, or by any combination of these methods.

The minimum requirement for students who complete fewer than 96 quarter hours at Ohio University is the final year (three quarters) with 48 hours of credit. For a student who completes 96 or more quarter hours of Ohio University credit, *the final quarter shall be in residence* as defined by residence credit in the above paragraph.

If a student begins graduate study before completion of all requirements for a bachelor's degree, residence for the bachelor's degree will be reduced by as many hours as credit hours of graduate work completed. The number of hours subtracted will be credited toward the residence requirement for a master's degree if the credit is acceptable in the program approved for graduate work toward a degree. Residence used for meeting requirements for one or more bachelor's degrees may not also be used for meeting the residence requirements for a master's degree.

The residence regulations apply to a student who has been approved for graduation *in absentia* and is completing the last year in an accredited institution, except that the regulations apply to residence before the student leaves the University.

A student should make certain that particular residence requirements of his or her college also have been met.

#### Associate Degree

A student seeking an associate degree must earn at least 30 quarter hours of residence credit at Ohio University. Moreover, students who complete fewer than 60 quarter hours of Ohio University credit must earn at least eight of the final 15 hours in residence as defined below. If the degree applicant has not earned Ohio University credit within two years of the quarter in which application is made, he or she must earn Ohio University credit during the quarter in which the associate degree is earned.

Residence credit is defined as credit earned by regular enrollment at any Ohio University campus, by any of the approved programs abroad, by any approved student teaching, by Independent Study through Correspondence or Course Credit by Examination arranged through Ohio University's Office of Lifelong Learning, by degree credit earned through continuing education, or by any combination of these.

Problems related to the residence requirements should be discussed with the student's academic dean. In certain cases exceptions to the residence requirements may be made.

### IN ABSENTIA

*In absentia* permission is obtained in writing from the dean of the college in which the student is enrolled. To obtain the bachelor's degree, a student who has been approved for the senior-*in-absentia* privilege in an approved professional school must have completed a full year's work in the professional school of the quality prescribed for the bachelor's degree at Ohio University and be eligible for advancement without condition to the second year. The official transcript from the school must be submitted to the Office of Admissions, Chubb Hall, Ohio University, before the degree-conferring date.

The *in absentia* privilege does not apply to graduate degree programs.

### CATALOG OF ENTRY

The published degree and major requirements stated herein remain in effect for a student entering under this catalog for a period of five years from the date of first registration in the University. If the student does not complete all degree requirements within five years, the requirements of the current catalog take effect.

Changes in either major or nonmajor requirements made necessary by altered or discontinued courses or by requirements imposed by external accrediting or certification agencies will be resolved on an individual basis by the dean of the student's degree college. Wherever it is possible, new requirements will be implemented with a beginning class or upon the expiration of the appropriate time limit.

A transfer student is governed by the same regulations, except that the number of years in which to complete the degree requirements is reduced by the number of years of transferred work.

### GRADUATION WITH HONORS

A candidate for the bachelor's degree who is graduated with a point-hour ratio of 3.0 to 3.49 on all hours attempted is distinguished by the notations "with honor" on the commencement program and the student's permanent record and "cum laude" on the diploma; with a point-hour ratio of 3.50 or above, the candidate is distinguished by the notations "with high honor" on the program and the student's permanent record and "summa cum laude" on the diploma.

A candidate must complete a minimum of 48 hours of letter grades in residence at Ohio University to be eligible for honors.

A candidate who has successfully completed a program of study with honors is distinguished in the commencement program and on the diploma with the appropriate notation.

### GRANTING OF DEGREES AND COMMENCEMENT

Degrees are granted at the close of each quarter. The annual commencement is held at the close of the spring

quarter. Candidates for spring quarter graduation and recipients of degrees at the preceding summer, fall, and winter quarters are invited to attend the exercises.

## A SECOND BACHELOR'S DEGREE

A student who desires two bachelor's degrees may meet the requirements for them either simultaneously or successively:

1. If a student desires to complete the requirements for the two degrees conferred on the same date, he or she must meet the particular requirements for both degrees and must have completed a total of 13 quarters of college work or its equivalent (208 hours), with a minimum of five quarters of residence, or the equivalent, at Ohio University. When the two degrees are offered by different colleges, the student must register in both colleges and meet the college residence requirement the quarter in which the degrees are to be conferred.
2. If a student has met the requirements for two degrees as indicated above and desires to have the degrees conferred in successive quarters, he or she may do so without further credit or residence. For example, one degree may be conferred at the end of one quarter and application made for the second degree in a subsequent quarter.
3. If a student desires to take a second bachelor's degree after receiving the first, he or she must complete the requirements for the second bachelor's degree and meet the residence requirement in the college offering the second degree. (See individual college requirements under Colleges and Curricula.)

## COURSE CREDIT BY EXAMINATION

Course Credit by Examination is designed for students who wish to demonstrate proficiency in a particular Ohio University course. A student may take up to six months after enrolling for credit by examination to prepare for the examination. An information sheet describing the nature of the examination is used by the student as a guide in preparing for it. Regular Ohio University credit is granted for a grade of D- or better with the pass/fail option available in accordance with the University regulations for this option. A failed CCE course will appear on the transcript as an F, in the regular manner. In order for a student to retake a course failed in this program, special permission must be obtained from the office of the student's dean. The grade received is used in computing the point-hour ratio of Ohio University students, but enrollment in Course Credit by Examination does not affect the quarterly course load.

Ohio University students must obtain permission from their academic deans to enroll in the program. Others are not required to have permission, but if they plan to transfer the credit to another institution they should ascertain in advance if it will be accepted.

Registration and arrangements for the examinations are made in the Office of Independent Study, 302 Tupper Hall. Complete information and a listing of the courses regularly available can be obtained at this office.

## GENERAL EDUCATION REQUIREMENT\*

An educated person needs certain intellectual skills in order to participate effectively in society. These include: (1) the ability to communicate effectively through the written word and the ability to use quantitative or symbolic reasoning; (2) broad knowledge of the major fields of learning; and (3) a capacity for evaluation and synthesis. To meet these

objectives, Ohio University has instituted a three-tier General Education Requirement to be met prior to graduation by all students according to the following schedule.

Tier I: Quantitative Skills and English Composition

Tier II: Breadth of Knowledge

Tier III: Synthesis

\*Honors Tutorial College students are exempted from meeting University General Education Requirements.

### Tier I: Quantitative Skills

All students entering Ohio University as freshmen in September 1980, and in subsequent years must demonstrate an acceptable level of quantitative skills. Examinations administered by Ohio University will determine whether a student must take a basic quantitative skills course (MATH 101) prior to enrollment in one of the following Tier I courses:

CS 220	PHIL 120
MATH 113, 115, 151	PSY 121
MATH 120, 121 (elem. education majors only)	

These courses are marked in the Courses of Instruction section of this catalog by the designation (1M) following the title and credit hours.

If a student is able to demonstrate by examination exceptional quantitative skills, he or she may be exempted from the Tier I requirement. This level of exceptional skill is assumed to be equivalent to passing a course at the level of MATH 163A or higher.

### Tier I: English Composition

All students entering Ohio University as freshmen must demonstrate an acceptable level of writing skill.

Exams administered by Ohio University will determine whether a student should take a basic writing skills course (ENG 150) prior to enrollment in either ENG 151, 152, or 153. These courses are marked in the Courses of Instruction section of this catalog by the designation (1E) following the title and credit hours.

An advanced composition course is also required. Students unable to demonstrate advanced writing proficiency at the junior level must take, prior to graduation, an approved advanced writing course such as:

ANTH 356J	HECE 345J
ART 300J	HLTH 370J
CA 360J	HREC 370J
EDCI 331J	IT 370J
ENG 305J or 308J or 319J	JOUR 441J
FILM 344J	MGT 325J
GEOG 375J	MUS 320J
HIST 301J or 396 J	PHIL 301J, 360J
	SOC 356J

These courses are marked in the Courses of Instruction section of this catalog by the designation (1J) following the title and credit hours.

The requirements faced by transfer students are determined by point of entry and the number and type of credit hours transferred.

### Tier II: Breadth of Knowledge

Students entering Ohio University in September, 1981 and in subsequent years are required prior to graduation to complete a total of 30 credit hours from an approved list of courses in the following areas:

- Applied Science and Technology (A)
- Humanities and Fine Arts (H)

Natural Sciences and Mathematics (N)  
 Social Sciences (S)  
 Third World Cultures (T)

Students are required to take at least four credit hours in four of the five distribution areas and may satisfy no more than two of the required four areas with courses from a single department. Students may satisfy no more than 12 of the 30 hours with courses from a single department.

Courses that fulfill a Tier I requirement cannot be applied toward Tier II. A student may apply one approved Tier II course in his or her major department toward the partial fulfillment of the Tier II requirement (In the case of Bachelor of Specialized Studies students, one approved Tier II course in the area of concentration may fulfill a Tier II requirement).

The students may select, in consultation with the advisor, courses from among the following departments as listed by their catalog numbers, to fulfill the Tier II breadth of knowledge requirement. Please consult the Courses of Instruction section of this catalog for descriptions of courses currently approved. Approved courses are marked by (2A), (2H), (2N), (2S), or (2T) following the title and credit hours.

### **Applied Sciences and Technology (2A)**

Botany: 103, 160  
 Chemical Engineering: 331  
 Chemistry: 101  
 Engineering and Technology: 280, 320, 350, 470  
 Geography: 201, 260  
 Geology: 201, 231  
 Health and Sport Sciences: 202  
 Hearing and Speech Sciences: 108  
 Home Economics Food and Nutrition: 128  
 Industrial Technology: 110  
 Microbiology: 211, 212

### **Humanities and Fine Arts (2H)**

Afro-American Studies: 110, 150, 210, 211, 250, 350  
 Art: 100  
 Art History: 211, 212, 213  
 Comparative Arts: 117, 118, 211, 212, 213, 270, 271, 272  
 Dance: 170, 471, 472, 473  
 English: 200, 201, 202, 203, 204, 205, 206  
 Film: 201, 202, 203  
 Foreign Languages and Literatures: *Classical Languages*: 127, 234, 235, 236, 237. *Modern Languages*: *French*: 211, 212, 213. *German*: 211, 212, 213. *Greek*: 211, 212, 213. *Italian*: 211, 212, 213. *Russian*: 211, 212, 213. *Foreign Literatures*: 335, 336, 337, 338A, 338B.  
 History: 121, 122, 123  
 Humanities: 107, 108, 109, 117  
 Interpersonal Communication: 101  
 Music: 100, 120  
 Philosophy: 101, 130, 160, 216, 232, 240, 260, 310, 311, 312, 361, 362  
 Theater: 170, 171, 270, 271, 272  
 Women's Studies: 100

### **Natural Sciences and Mathematics (2N)**

Anthropology: 201  
 Astronomy/Physical Science: 100, 100B, 100D, 101, 101L, 105, 105L, 140  
 Regional campuses only: 121/121L, 122/122L, 123/123L  
 Botany: 100, 100L, 101, 102, 110, 111  
 Chemistry: 121, 122, 123, 151, 152, 153  
 Geography: 101  
 Geology: 101, 120, 211, 221  
 Mathematics: 163AB, 263ABC  
 Microbiology: 201 (O.U. Zanesville campus only)  
 Physics: 201, 202, 203, 251, 252, 253  
 Zoology: 100, 101, 103, 150, 151, 171, 172, 173, 225; and 130, 131 (O.U. Zanesville campus only)

### **Social Sciences (2S)**

Afro-American Studies: 101, 202  
 Anthropology/Archaeology: 202  
 Economics: 103, 104  
 Geography: 121, 132  
 History: 101, 102, 103, 211, 212, 213, 315AB  
 Home Economics-Child Development: 160  
 Interpersonal Communication: 351, 352, 353  
 Journalism: 105  
 Linguistics: 270  
 Management: 200  
 Political Science: 101, 102, 103, 210, 230, 250, 270, 331  
 Psychology: 101  
 Social Work: 101  
 Sociology: 101, 201, 223  
 Telecommunications: 105

### **Third World Cultures (2T)**

Anthropology: 101  
 Art History: 330, 331  
 Dance: 351, 352, 353  
 English: 306A, 306B, 306C  
 Foreign Languages and Literatures: *Arabic*: 211, 212, 213. *Chinese*: 211, 212, 213. *Indonesian/Malaysian*: 211, 212, 213. *Japanese*: 211, 212, 213, 250. *Spanish*: 211, 212, 213, 349. *Swahili*: 211, 212, 213.  
 Geography: 131  
 History: 131, 241, 242, 243, 244, 323ABC, 335AB, 341ABC, 345ABC, 346AB  
 International Studies: 103, 113, 121  
 Philosophy: 370, 371, 372  
 Political Science: 340

### **Tier III: Synthesis**

Students entering Ohio University in September 1982, or thereafter, are required, after attaining senior rank, to take one of the courses approved as meeting the Tier III criterion of interdisciplinary synthesis. Transfer students should consult with their college office on the Tier III requirement. Tier III is not required for students who entered Ohio University prior to September 1982; however, such students are encouraged to take a Tier III course. Students should consult the Courses of Instruction section of this catalog, under the heading Tier III, for a full listing of Tier III courses.

## **Services for Students**

### **ACADEMIC ADVANCEMENT CENTER**

The Academic Advancement Center helps undergraduate students develop the skills and attitudes necessary to master college-level work successfully. Individualized instruction is available free upon request in reading, writing, mathematics, and study skills; assistance with keyboarding and word processing is also provided.

Credit-bearing courses in reading and study skills are also offered to freshmen. UC 110 and UC 112 each award two hours of credit; primary emphasis is placed on immediate application of skills learned to other academic work. (See the Courses of Instruction section for course content descriptions.)

The center additionally provides tutoring help sessions in many freshman-level courses. Students may attend help sessions as frequently as desired to ask questions and to clarify points of confusion. Session schedules are announced by instructors of those courses and are available in residence halls and deans' offices. In addition to free help sessions, private tutor referrals in any course are available from the center. Specific arrangements, including fee payment, are then made between student and tutor.

Project CAP, or the College Adjustment Program, is a special program for selected freshmen entering Ohio University. Sponsored by the Academic Advancement Center and a TRIO grant from the U.S. Dept. of Education, its purpose is to help new students adjust to college and to meet their educational goals. (See University College section for details.)

The Access and Success Program is a new program for students relocating from Ohio University's regional campuses or transferring from Hocking College to the Athens campus. The program coordinator provides general information about the Athens campus, its resources and procedures, and a peer mentor/support group.

For further information about Academic Advancement Center programs, contact the center on the first floor of Alden Library.

## **CAREER PLANNING AND PLACEMENT**

The Office of Career Planning and Placement offers students assistance in making career decisions, gaining experience to explore career options, and conducting effective job searches. Services include:

- Individual career advising, including assessment of interests, abilities, and values.
- Computerized career guidance programs.
- Seminars on career decision-making, resume preparation, interview techniques, and other aspects of the job search.
- A Career Resource Library containing a wealth of material: career information, employer directories, graduate school guides and admissions test bulletins, internship/summer job listings, employer literature, and professional job vacancies.

In addition to the above services which are free to all students, Career Planning and Placement provides special assistance to students who are ready to graduate. These include on-campus interviewing, resume referral, credential files, and a biweekly job listing. Seniors may obtain these services by registering with Career Planning and Placement during the academic year in which they will graduate. Registration requires attendance at an orientation seminar explaining services, procedures, and basic job-hunting techniques, and payment of a nominal fee.

All students are encouraged to work with the Office of Career Planning and Placement throughout their University experience for assistance in all career-related matters.

## **COMPUTING AND LEARNING SERVICES**

**Computer Services.** The Instruction and Research Center (IRC) provides state-of-the-art computing resources and facilities to all Ohio University students at no charge (except for laser printing). Professors or instructors will arrange for student access to the computer resources.

The Instruction and Research Center operates a number of satellite labs across the campus where students may use computer terminals or microcomputers for their academic work. All terminals and many of the microcomputers in the labs can be used to access Ohio University's network of computers.

The labs are located across the campus, including Alden Library, Haning Hall, Copeland Hall, the Innovation Center, Grover Center, the Music Building, Stocker Center, Ellis Hall, and Morton Hall. Many departments also operate computing labs for their own students. The departmental and IRC-managed locations have a wide variety of microcomputer software available, including Fortran, Pascal, Basic, WordPerfect, Lotus, MacWrite, MacDraw, and many others.

Three dormitories have labs available. Jefferson Hall and Brough House each have a terminal cluster and printer

connected to the campus computer network. Hoover House contains microcomputers that can also be used to access the mainframe computers.

The Alden Instruction Support Lab also houses 26 self-instructional audio-visual carrels allowing students to use videocassette playback equipment, as well as synchronized slide and filmstrip equipment, as required by academic courses.

The main offices for the Instruction and Research Center and the Haning Instructional Support Lab are located on the first floor of Haning Hall. The Alden Instructional Support Lab is located on the second floor of the Alden Library. Open lab hours for the campus satellite computer labs are posted in the labs on a quarterly basis.

A network of high-speed printers is conveniently located around the campus for mainframe printed output. Most of the micro labs contain at least one letter-quality printer, and high-quality laser printer output is available in the Alden and Haning Instructional Support Labs.

**Communications.** Ohio University Communication Network Services (CNS) provides telephone, data, and video communications to students, faculty, and staff. In addition, CNS provides maintenance and technical support for microcomputer hardware and audiovisual equipment. The backbone of the communication system is based on fiber optics and the latest in digital switching equipment. Telephone and data communications are being updated at the regional campus locations in order to link all campuses together electronically.

**Learning Resources Center.** The Learning Resources Center (LRC), located on the second floor of Alden Library, provides audiovisual facilities and services to the entire University community. The center's media library contains over 2,500 instructional films, videotapes, and other media. Instructional development and graphic/photographic production services, which generate a variety of self-study and group-instruction materials, are available for academic courses at faculty request. Advice and assistance in the purchase and configuration for several models of personal computers also are available for faculty, staff, and students. Audio-visual equipment such as projectors and tape recorders may be rented by registered campus student organizations.

A brochure describing in detail all of the Computing and Learning Services is available for faculty, staff, and students upon request.

## **COUNSELING AND PSYCHOLOGICAL SERVICES**

Counseling and psychological services are available to undergraduate and graduate students on an individual and group basis for educational, career, and personal adjustment concerns. Confidential consultations are provided by a staff of counselors, psychology trainees, and psychologists.

Students having academic difficulties may receive help in understanding and resolving their concerns so that they may improve their performance.

Students who are uncertain about their educational or career objectives may obtain assistance in appraising their abilities, interests, performances, etc., so that they may identify more appropriate and satisfying directions.

Students with personal problems of any kind (emotional, social, marital, substance abuse, stress, etc.) may receive help in understanding and resolving those difficulties.

Workshops on a variety of topics, designed to enhance the educational, social, and personal growth of students, are frequently offered and widely publicized.

Students who wish to make an appointment to discuss their educational, career, or personal adjustment concerns should contact the receptionist on the third floor of Hudson



Health Center (use the side entrance next to Voigt Hall) or call 593-1616 between 8 a.m. to noon and 1 p.m. to 5 p.m., Monday through Friday.

## HANDICAPPED SERVICES

Services to disabled students, faculty, and staff are provided by many different units on the Ohio University campus. The Office of Affirmative Action, located in 101 Chubb House, has primary responsibility for identifying and coordinating the services provided by each of these units to meet the particular needs of each disabled person.

The Office of Affirmative Action provides guidelines for required documentation of disability, contact with social service agencies, and an introduction to on-campus services for the disabled person. These services include priority scheduling, introduction to faculty regarding classroom and academic accommodation, learning and study services including Recording for the Blind (RFB) and textbook taping, library assistance, tutoring and study skills assistance through Project CAP, parking, workplace accommodation, and housing accommodations.

Although all students, regardless of disability, are subject to established academic requirements, Ohio University recognizes the need for accommodations to facilitate program accessibility. Disabled students and staff are encouraged to contact the Office of Affirmative Action to effect these accommodations.

## HOUSING OFFICE

The main function of the University Housing Office is to assist students in acquiring housing on the Ohio University campus.

The Housing Office is responsible for all residence hall and room assignments for students residing in University-owned residence halls, and the office initiates all room and board charges.

The Housing Office supervises assignment and maintenance of the married student apartment complexes.

## Housing Regulations

All freshman and sophomore students with fewer than 90 earned credit hours must reside in University-owned housing and participate in the associated mandatory board plan, subject to the exemptions listed below. Status will be determined on the basis of quarter hour credits earned at the conclusion of the immediately preceding spring quarter for continuing students. A student who is close to achieving 90 hours of credit at the conclusion of the spring quarter may petition to delay satisfaction of the required hours until the end of the summer session. Students requesting this extension who fail to earn a certified 90 hours at the conclusion of the summer session will be required to comply with the housing regulation. For transfer and re-enrolling students the number of hours earned will be subject to certification by the director of admissions. For relocating students the number of hours earned will be subject to certification by the director of registration. Failure of a student, subject to the parietal rule, to comply with this condition of registration is cause for denial or cancellation of registration.

The exemptions, which must be requested in writing, are:

1. Students with fewer than 90 earned credit hours enrolled for not more than eight quarter hour credits during the fall, winter, or spring quarters and for fewer than three hours during a summer session;

2. Married students with fewer than 90 earned credit hours residing with their spouses within commuting distance of the University;
3. Students with fewer than 90 earned credit hours residing with parents or guardians whose permanent residence is within commuting distance of the University;
4. Students with 45 or more earned credit hours living in recognized fraternity or sorority houses;
5. Student veterans with fewer than 90 earned credit hours who have 18 months or more of active military service.

**NOTE:** All students with 90 or more hours of credit earned are permitted to reside in housing which coincides with their individual needs. It should be noted that the University bears no responsibility to either the homeowner or the student resident for the living conditions or problems arising in off-campus housing.

**Special Students.** All special students must comply with the above regulations.

## INSURANCE, MAJOR MEDICAL

A major medical insurance plan designed to supplement the care provided by the Student Health Service is mandatory for every student registered for more than six hours of credit unless the student submits evidence of coverage by comparable private insurance.

The plan provides protection against major medical and surgical expenses regardless of where the student may be. In addition to the medical and surgical benefits payable under the terms of the group plan contract, an accidental death payment is part of the insurance policy.

To assist married students, a major medical-surgical expense protection insurance plan for dependents is available through the University comprehensive group medical insurance.

## INTERCOLLEGIATE ATHLETICS

Ohio University is a charter member of the Mid-American Conference (MAC) which is composed of nine midwestern universities including: Ball State, Bowling Green, Central Michigan, Eastern Michigan, Kent State, Miami, Toledo, and Western Michigan.

The Department of Athletics adheres to the policies and procedures of the National Collegiate Athletic Association (NCAA) concerning organization, administration, and financing.

Ohio University fields a total of 17 intercollegiate sports including 9 men's teams and 8 women's teams. The University offers baseball, basketball, cross country, football, golf, swimming and diving, indoor track, outdoor track, and wrestling for men. Women's sports include basketball, cross country, field hockey, softball, swimming, indoor track, outdoor track, and volleyball.

The Reese Trophy is awarded annually to the institution compiling the best men's overall record in the MAC. The Jacoby Trophy was instituted for women during 1982-83.

Athletic facilities include the 13,072-seat Convocation Center, the site of all Ohio University home basketball games. Constructed in 1968, the facility houses the athletic offices, training facilities, weight room, and equipment room. The newly renovated Peden Stadium is the home of the Ohio University football team, with a seating capacity of 20,000. It is also the site of the all-weather Goldsberry Track. The remodeled baseball field, Trautwein Field, ranks among the finest facilities in the MAC. Completed in 1984, the Aquatic Center is the newest athletic facility. The Olympic-sized swimming pool includes sixteen 25-yard

lanes and nine 50-meter lanes in addition to two-one meter and two-three meter diving boards.

Students interested in participating in intercollegiate athletics should contact the head coach of the preferred sport directly during the first two weeks of the academic year.

## INTERNATIONAL STUDENTS

**Admission.** Information concerning the admission of undergraduate international students may be obtained from the Director of Admissions, Chubb Hall. Graduate students should contact the Office of Graduate Student Services, Wilson Hall.

**Financial Aid.** There is a very limited amount of financial aid available for undergraduate international students. In no case does this cover more than a portion of tuition or other expenses. Students entering from overseas are eligible to apply for awards based on academic promise; students already enrolled at Ohio University may apply for the same awards, and in addition, may request special aid in cases of demonstrated need. Undergraduate students may apply for these scholarships and grants-in-aid by contacting the Office of Student Financial Aid and Scholarships. Graduate students should apply to the academic department in which they plan to enroll.

**International House.** A centrally located residence hall offers special programs for roughly equal numbers of international and U.S. students. The emphasis is on cultural interaction and mutual understanding. A large meeting room, lounges, and a dining facility are available. International students and U.S. students with interest in other countries are encouraged to live in this hall. Staff, both international and U.S., are selected because of their interest and training in international affairs.

**Associations.** More than twenty internationally oriented student organizations exist at Ohio University, representing national, regional, religious, and social interests. They join together for special programs throughout the year, reaching a high point during International Week and the International Street Fair in spring, conducted in cooperation with the Athens Business Association.

**Athens Friends of International Students.** This organization runs a hospitality program and an International Wives' Club and, on a modest scale, matches foreign students with American families in Athens, Ohio, and the vicinity. These visits are short, and may be only for a dinner or an afternoon excursion, but sometimes long friendships develop from this brief opportunity to gain insights into American home life.

The International Wives' Club brings together the wives of foreign students on campus and interested wives of faculty and community people. It serves as a forum for ideas and information which they find useful to share, and offers a productive and easy way to participate in University life.

**Ohio Program of Intensive English (OPIE).** The OPIE administers English proficiency examinations to all new foreign students and provides intensive language instruction for those needing it. See descriptions of courses and program elsewhere in this catalog.

**The International Student and Faculty Services Office.** This office is available for consultation on all matters of interest to foreign students, including immigration, financial, and personal problems. All new students, as well as returning students starting a new degree program, must report to the advisor's office upon arrival. An orientation

program will be conducted for a few days prior to the opening of each quarter in order to introduce new students to the campus.

International Student and Faculty Services also works with other parts of Ohio University to help the international students join in campus activities. Through cooperation with other offices such as Student Life, Residence Life, International Studies, Phi Beta Delta, the Fulbright Alumni Association, and others; by conducting Cross-Cultural Awareness Workshops; and by promotion of programs, it seeks to create a supportive climate for students from other countries.

**International Women's Program.** The Office of International Student and Faculty Services coordinates this support group for wives of foreign students. It meets once a week at the Mill Street Apartment complex and provides a way for the participants to share their culture with other wives. A variety of programs and excursions are planned by the participants.

## LIBRARIES

The main library facility on the Athens campus is in the Vernon Roger Alden Library. The seven-story, air-conditioned modern building has a collection of about 1.5 million bound volumes, 10,000 periodical subscriptions, and almost 2 million items which include microform units, maps, photographs, cassettes, videotapes, disks, and other research materials. There are seating accommodations for 2,800 readers. Alden Library is open seven days a week for a total of 102 hours.

**Collections.** Besides the main collection which is arranged by the Library of Congress Classification System, the library houses separate subject and special collections: the Archives and Special Collections, Children's Collection, Government Documents, the Health Sciences Library, Maps Collection, Microforms and Nonprints Collection, and Southeast Asia Collection. In separate buildings are the Music/Dance Library and a number of departmental collections in several scientific disciplines. Each of the regional campuses also has a well-established library facility.

**Services.** To make the library's collections more accessible to its users, ALICE, an on-line public access catalog and circulation system, was implemented in 1983. Catalog terminals are located throughout the library for easy access to the library's holdings. Remote access is available to anyone having direct or dial-in access to the University computer network. General tours, instructional lecture tours, and a video orientation presentation are offered to classes and groups upon request. Subject bibliographers' services are available to give assistance with problems in specific academic disciplines.

On-line information retrieval systems, including MEDLINE and CIRS (Computerized Information Retrieval Service) are available. An electronic reference service using CD-ROMS also expedites research. Through the OCLC, nationwide shared cataloging and interlibrary loan network library collections across the country are now easily accessible. The library is part of the age of resource sharing to better serve the academic community.

## MEDICAL SERVICES

Student Health Service, located in Hudson Health Center, provides outpatient clinic and complete ancillary services, including health education, pharmaceutical, X-ray, clinical laboratory, and physical therapy services.

The Student Health Service staff includes full-time physicians; a pharmacist; a coordinator of health education services; registered nurses; and registered laboratory, X-ray, and other allied personnel.

A continuous health record is maintained on each student, beginning with the report of medical history obtained at the time of the student's first visit to the Hudson Health Center for evaluation and/or treatment of any medical condition. A tuberculosis skin test administered by the Student Health Service is required of all new international students upon arrival on campus and of international students returning after an absence of two or more years.

## **MOTOR VEHICLES**

University policy and regulations state that no student shall drive, operate, park, or otherwise use a motor vehicle on the land and property of the University without first registering the vehicle with the director of campus safety. This regulation includes student-owned vehicles; vehicles belonging to parents or relatives (including wives or husbands); and vehicles belonging to friends, rental agencies, and dealers.

Upon registration the student will be given a decal which must be attached to the vehicle as described in the brochure issued with the decal.

Failure to register a motor vehicle as provided by the regulations will result in a fine and/or disciplinary action.

While two- and three-wheeled motor vehicles are not permitted in the residence hall areas of the University, they are permitted on certain designated streets on the campus. They may be parked only in areas specifically designated as motorcycle parking.

## **OMBUDSMAN OF THE UNIVERSITY**

The ombudsman's primary responsibility is to assist students and other members of the University community in expediting settlement of complaints and grievances. Using broad investigatory powers and direct access to all University officials of instruction and administration, the ombudsman may intervene in the bureaucratic process on behalf of individuals when that process unnecessarily or unfairly impinges upon them.

Those with problems should first try to discuss their concerns with the person most closely associated with the situation. Should such discussion seem difficult or fail to bring acceptable results, the ombudsman may prove an invaluable aid. The ombudsman's office is in Chubb House (not Chubb Hall), 115 S. Court St.

## **RECREATIONAL SPORTS**

The Ohio University Division of Recreational Sports administers the following: intramural sports, club sports, informal sports, intramural aerobics, fitness center, recreation facility scheduling and reservations, and recreation equipment rental.

The Intramural Sports Program offers a wide range of activities—33 in number—for men and women, involving individual, dual, and team competition. Activities include football, basketball, baseball, broomball, volleyball, inner-tube water polo, softball, tennis, racquetball, and soccer. A coed program for dual and team competition also is offered in a majority of the activities.

The Division of Recreational Sports serves as the administrative unit for all recognized club sports on campus. Currently there are 16 recognized clubs. Any group of students, faculty, and staff who wishes to organize for the purposes of practicing and/or competing, or individuals interested in a particular club should contact the Recreational Sports office in Grover Center. An informal recrea-

tional program also is available when time and facilities permit, and an aerobics program for students is offered in the evenings each quarter.

A new fitness center with 44 pieces of equipment opened in January 1991 in Grover Center. The center is open 12-15 hours daily, seven days per week.

Facilities can be reserved through the Recreational Sports office for group activities including recreation, games, and picnics. Facilities include Grover Center, intramural fields, South Green fields, McCracken Field, band practice area, Stimson Avenue Field, intramural baseball field area. Recreation equipment (balls, bats, nets, etc.) can be reserved and rented for picnics, games, and social gatherings by students, faculty, and staff.

For further information, contact the Division of Recreational Sports in Grover Center.

## **RESIDENCE LIFE**

The focus of this department is to support the educational goals of the University in the residence halls. The staff promotes the concepts of community living, facilitates the development of individuals and groups within the living environment, and provides support and information to the residents.

The residential campus is divided into three distinct geographical areas commonly referred to as greens. There is a Residence Life Office located on each green (East, South, and West) for student convenience. The central office is located in 050 Chubb Hall.

Each green has full-time professional as well as para-professional live-in staff who have been carefully selected and trained to offer the resident student the most informed and meaningful assistance possible. The staff-to-student ratio in upperclass halls is about 1:35, while in freshman halls it is 1:26. The department also coordinates a Student Security Aide Program to assist with student and building security.

Services offered by this department include providing a safe and healthful environment conducive to sound academic pursuit; creating opportunities for growth and development through educational, recreational, social, and cultural programming designed to meet the needs and interests of the students; involving faculty in the residence halls as academic associates and resource people; meeting the needs of students through the use of special-interest housing (intensive study, honors, academic emphasis, academic interests); promoting student involvement and leadership by encouraging participation in hall government; emphasizing the concepts of self-responsibility, respect, and consideration for others; interpreting University policies and procedures; serving the resident students as an information source and as a referral agent to other University services; and providing confidential personal advising for such concerns as adjustment, academic performance, substance abuse, and interpersonal relationships.

Research indicates that much of the learning that occurs during the collegiate experience takes place outside the formal classroom setting. The living-learning atmosphere of the residence hall is one of the prime catalysts in this growth process. While each residence hall is unique in character and spirit, they all offer the opportunity to meet, interact with, and learn from a very diverse student population.

## **SPEECH AND HEARING SERVICES**

The Speech and Hearing Clinic offers diagnostic and remedial services to University students, University faculty, and staff. Charges for services are at rates which are less than the charges to the general public. Clinical services are

available to children and adults of the community and surrounding area for a nominal charge. All types of speech and/or hearing disorders in people of all age ranges are evaluated and receive therapy. The audiological division is equipped and staffed to provide complete hearing diagnostic services, to determine the need for and recommend special kinds of hearing aids, and to provide therapy for all types of hearing loss.

A program for language and speech development operates in the on-campus clinic five days a week, and regional county clinics serve clients weekly. Undergraduate and graduate students prepare for clinical practice in public schools, special schools, private clinics, or for university teaching and research. Persons wishing complete counseling about the training program, information about the service program, or help with a speech or hearing problem should inquire at the clinic office in Lindley Hall between 8 a.m. and 5 p.m., Monday through Friday.

## STUDENT FINANCIAL AID AND SCHOLARSHIPS

The purpose of financial aid and scholarships is to supplement student and parent contributions toward the cost of education, as well as to recognize academic achievement and special talents. Ohio University offers a variety of scholarships, grants, loans, and part-time employment to assist students in financing their education. The Office of Student Financial Aid and Scholarships (OSFAS) is responsible for the processing and disbursing of all types of federal, state, private, and institutional (university) funds to students.

### Types of Financial Assistance

There are two general headings used to describe all types of financial assistance—gift aid and self-help. Gift aid (scholarships and grants) does not have to be repaid, while self-help aid (loans and part-time employment) requires some effort on the part of the student.

**Scholarships**—Ohio University has an extensive scholarship program available to freshmen and upperclass students. Scholarships are awarded on a competitive basis for academic achievement and special talent, as well as on the basis of geographical residence and area of study. Financial need is not always a prerequisite.

**Grants**—Grants are considered gift aid that need not be repaid by the recipient. Most grant aid is based on some type of need-based eligibility criteria. The sources may vary from state, federal, private, and/or institutional funds, so students are encouraged to actively seek out all sources.

**Loans**—Student loans are playing an increasingly significant role in financing post-secondary education. Educational loans have favorable terms and conditions, so students should not be afraid to borrow as an investment in their future. However, loans represent debts which must be repaid, and failure to repay can result in substantial penalties to the student.

**Employment**—Student employment is a viable alternative, or a supplement, to borrowing for many students. Ohio University has a variety of student employment programs to provide self-help for students who wish to work on a part-time basis while pursuing their education. Working students should attempt to establish a reasonable balance between their academic efforts and work schedules. Consequently, students may not work more than 20 hours per week when classes are in session. Ohio University is an equal opportunity and affirmative action employer. The Student Employment Office, as part of the OSFAS, reaffirms the University's commitment to the policy that no employer may discriminate on the basis of race, sex, creed, ethnic origin, or handicap in employment practices. Also,

there will be no discrimination because of age, except as governed by state and federal laws and guidelines.

### Application Procedure

To apply for any of the five federal need-based financial aid programs (Pell Grant, Supplemental Educational Opportunity Grant, College Work Study, Perkins Loan, and the Stafford Student Loan) and the Ohio University Grant (OUG), all applicants should complete the **Financial Aid Form (FAF)** published by the College Scholarship Service (CSS) and pay the appropriate fees charged for processing the application data. Specific instructions for completing the FAF are included with the FAF packet provided by the OSFAS. FAF forms for each academic year may be obtained from any local high school, college, or university after **January 1**.

Three of the five need-based aid programs are called **Campus-Based Aid** (College Work Study, Perkins Loan, and the Supplemental Educational Opportunity Grant). Campus-Based Aid (CBA) is awarded differently from the Pell Grant and the Stafford Student Loan in that CBA funds are sent directly to the University from the federal government to be awarded by the aid administrator using federal eligibility criteria. Funding for these programs and for the OUG is limited; therefore, priority is given to those students who demonstrate the highest financial need and meet Ohio University's priority service date of **April 1** (graduate students are eligible only for CWS, the Perkins Loan, and the Stafford Student Loan).

Though the priority deadline for CBA is **April 1** of each year, (i.e., the FAF analysis must be on file at O.U.), it is recommended that students who do not meet this deadline and/or the eligibility criteria continue through the application process to complete the requirements for the other types of assistance.

Federal regulations and/or institutional policies are subject to change without prior notice. The OSFAS will attempt to keep students updated as necessary through various media on campus and via written notices. Therefore, it is vital that all aid applicants update their permanent and local addresses with the Registrar's Office as it becomes necessary to avoid delays that may be costly to the applicant.

### Need-Based Financial Aid

**1. Ohio Instructional Grant (OIG)** — All Ohio residents are encouraged to apply for the OIG by completing the OIG application and submitting it to the Ohio Board of Regents as soon as possible. The third Friday in September of the year you plan to enter college is the deadline for applying for the OIG. However, to receive your award early, you must apply early (see instructions enclosed with the OIG application) and submit your certificate to the OSFAS.

**2. Pell Grant** — All need-based applicants are required to apply for the Pell Grant by checking the appropriate item number (**number 30A**) on the FAF. As soon as your Student Aid Report (SAR) has been mailed to you from the College Scholarship Service, you must sign, date, and submit all copies to the OSFAS at Ohio University for processing. However, if the information on the SAR is incorrect, make the appropriate corrections on Part II and return to the processing center. Allow approximately four weeks for a corrected SAR to be sent to you. Upon receipt, forward the SAR to the OSFAS.

**3. Stafford Student Loan** — Graduate and undergraduate students who wish to apply for a Stafford Student Loan must file the FAF no later than April 1 to ensure time for processing and check disbursement for fall quarter. Stafford Student Loan applications may be obtained from a participating bank, credit union, or savings and loan association in your home town.

### Merit-Based Financial Aid

**Freshman Scholarships** — Applications are available in the Admissions Application Package. All freshman applicants must return the scholarship application to the Office of Student Financial Aid and Scholarships by the February 15 deadline. To be eligible for consideration, Athens campus applicants must have a minimum ACT score of 27 or combined SAT of 1,100 and rank in the top 20 percent of their high school class. In addition to their academic record, students entering the College of Fine Arts are evaluated by audition, interview, and portfolio review. All awards are made pending admission to Ohio University. Scholarship recipients are required to earn a minimum of 16 credit hours per quarter during the freshman year.

**Upperclass and Transfer Student Scholarships** — Applications are available in the OSFAS each year after January 1. All applications must be returned by March 1. To be considered for an upperclass scholarship for the next academic year, applicants must (a) normally have accumulated at the end of winter quarter in the application year a grade-point average (g.p.a.) of 3.4 (for College of Fine Arts students, minimum g.p.a. is 3.0); (b) have earned at least 32 hours for fall and winter quarters in the application year OR, if not currently enrolled, have submitted a transcript demonstrating 32 hours earned in the last two quarters of enrollment at Ohio University; and (c) have completed a minimum of two quarters at Ohio University. In addition, a student must have earned a total of 48 credit hours for the academic year prior to the year the award will be effective. Otherwise, the award will be rescinded. Transfer students are eligible to apply and will be evaluated on the basis of performance at the institution(s) previously attended. Late applicants will be given second priority considerations, pending funding availability.

**Regional Campus Scholarships** — Freshman and upperclass student applications are made available by each regional campus. Applicants must return their scholarship application to the Student Services Office of the individual regional campus they plan to attend. The criteria for nomination is somewhat different from the Athens campus, and the deadline date for returning the applications is April 1. Pay particular attention to the guidelines and application procedures on the scholarship application.

### College Cost

A college education can enrich an individual's life, increasing earning potential and the ability to contribute to society. As with every worthwhile investment in life, certain costs are attached. Ohio University has maintained low to moderate tuition, fees, and room and board costs in an attempt to make higher education accessible to all students.

Each year, the Ohio University Board of Trustees determines the fixed costs (tuition and fees, out-of-state surcharge, and room and board rates on campus) for graduate and undergraduate students. Variable costs (books and supplies, travel allowance, and personal and miscellaneous) are estimated by the OSFAS to arrive at the total cost of attending Ohio University for the academic year (three quarters). If students attend all four quarters, an adjustment is made to include the additional costs. Estimates are based on the Consumer Price Index and from periodic local survey data on housing and food costs. The total fixed costs plus variable costs make up the student's total cost (budget) for the academic year.

### Determining Need

The Congressional Methodology (CM) is the calculation used by the federal government to measure an applicant's need for assistance. All federal aid programs require that

applicants show need after the income and assets of the family (taken from the FAF) have been analyzed. The OSFAS uses the need analysis information from the FAF to determine the amount the parent and student are expected to contribute toward the student's education. Consideration is given to the parents' adjusted gross income, assets, taxes paid, number of dependents, number attending college, certain types of debt, and other factors. As a minimum, students with no dependents are expected to contribute \$700 and \$900 (respectively for freshman and upperclass students) from their own earnings.

The CM provides for a separate analysis of income and assets when (1) the student's and parent's adjusted gross incomes are less than \$15,000 per year, (2) unemployment has occurred under certain circumstances, or (3) separation, death, or divorce has occurred. The combination of the student and parent contribution yields the Expected Family Contribution (EFC).

Independent undergraduate and graduate students and their spouses (if applicable) are expected to assist in meeting their educational costs. The expected contribution is calculated from the previous year's earnings, untaxed income, veteran's benefits, and a percentage of personal savings and assets. A minimum expected contribution of \$1,200 for undergraduate and graduate students will be calculated in the Financial Aid Equation:

$$\begin{array}{r} \text{Cost of Education (Budget)} \\ (-) \text{ Minus Expected Family Contribution} \\ \hline = \text{Financial Need} \end{array}$$

### Eligibility Requirements

All Title IV federal aid recipients must comply with these regulations prior to disbursement of aid to their accounts.

#### The recipient must:

1. be a U.S. Citizen, a national or permanent resident of the U.S., or be in the U.S. for other than a temporary purpose. Citizens of the Marshall Islands, Federated States of Micronesia, or Palau should see a financial aid administrator. Permanent residents may be required to provide a copy of their I-252 or I-551 card before being awarded aid.
2. comply with the Statement of Educational Purpose and the U.S. Selective Service Registration requirements to be eligible for student aid.
3. be enrolled or accepted for enrollment in a degree or certificate program.
4. be making satisfactory academic progress as defined by Ohio University and the Office of Student Financial Aid and Scholarships (see Satisfactory Academic Progress Standards).
5. show financial need as determined by the Congressional Methodology need analysis.
6. comply with Anti-Drug Abuse Act Certification by signing a statement indicating that he/she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of controlled substances during the period covered by Title IV financial assistance.
7. must sign a student agreement to keep the OSFAS informed of changes in personal information.
8. The recipient (and parent if applying for PLUS loan) must not be in default on a National Direct Student Loan, Perkins Loan, a Stafford Student Loan (formerly the Guaranteed Student Loan), from any school, agency, or lender.
9. Transfer recipients must submit a copy of their Financial Aid Transcript from each college previously attended.



## Award Package

After the FAF need analysis and other documents have been received, reviewed for accuracy, and verified (if applicable), an award package is offered to all eligible applicants. The award package can be a combination of merit scholarships, state and federal grants, employment, and/or loan assistance to offset costs. Not all students receive all types of financial aid, but in general, the OSFAS attempts to balance "gift aid" (grants and scholarships) with "self-help" (employment and loans) within the limits of available funds and the eligibility of the applicants. Students who apply by the February 15 priority date are likely to receive more attractive packages than those who apply later.

## Notification of Aid Offers

A written notification of award offers or denials will be sent as appropriate to all applicants. **All award notifications (Notice of Award and Acceptance Agreement) will be sent via the U.S. mail to the student's permanent address to be signed and returned by a specified date. Failure to sign and return the award acceptance by the designated date will result in an automatic cancellation.** Applicants who are denied traditional gift aid (scholarships and grants) are encouraged to continue in the process to be considered for supplemental forms of assistance such as loans (Stafford Student Loan, PLUS, SLS) and employment (CSES, PACE, and CWS).

## Award Disbursements

Federal aid recipients must be enrolled officially through the Office of the Registrar to receive any type of financial assistance. All verification requirements for the FAF and the Student Aid Report (SAR) must be completed by submitting the requested documents (income tax returns, financial aid transcripts, etc.) before financial aid can be disbursed. Disbursement dates and procedures will vary, depending on the type of awards offered. Specific dates are available in the OSFAS and are listed in the *Schedule of Classes* printed for each quarter. In general, financial aid awards will be credited to the student's account each quarter. Total financial aid credits greater than the University charges will be issued beginning 14 days after the quarter starts in the form of an overage check to students to assist them in meeting other educationally-related expenses.

College Work Study awards are not credited to the students' accounts because these awards must be earned before being paid. Students who work are paid by check every two weeks. Please note the payment due dates in the billing statement from the Bursar's Office (see the *Schedule of Classes Bulletin* each quarter for specific disbursement dates).

## Refund and Repayments

For students who are entitled to a refund under the University's refund policy and who receive any SFA funds (excluding College Work Study, Byrd, or Douglas Scholarships), federal regulations require a portion of that refund to be returned to the appropriate SFA program according to a formula defined by federal regulations. If after receiving any financial aid in the form of a cash payment for non-institutional costs, a student then withdraws, drops out, or if he or she is expelled, then the student may be required to repay a portion of that aid to the appropriate program.

## Satisfactory Academic Progress Standards (SAP)

### Need-based Federal Assistance

For all federal aid recipients who received assistance for the first time after July 1, 1987, and all continuing federal aid recipients, there are three elements to the Satisfactory Academic Progress standards that must be met: (1) minimum credit hours earned for the appropriate enrollment status (full-time, three-quarter time, or half-time); (2) maximum time frame during which a degree or certificate must be granted; and (3) minimum 2.0 cumulative g.p.a.

Minimum credit hour standards are as follows: student aid applicants and recipients must earn the minimum hours attempted for the appropriate enrollment status. Full-time status is assigned to students attempting 12 or more credit hours, three-quarter time status is assigned to students attempting between 9 and 11 credit hours, and half-time status is assigned to students attempting between 6 and 8 credit hours (per quarter). Students who enroll for less than the minimum number of credit hours for half-time enrollment will be monitored as half-time students for that quarter.

Maximum time frame standards are as follows: for full-time students, a degree or certificate must be granted within five academic years or 15 quarters. For three-quarter time students, it must be granted within 6.67 academic years or 20 quarters. For half-time students, it must be granted within 10 academic years or 30 quarters.

For all first-time federal aid recipients, a minimum 2.0 cumulative g.p.a. must be earned by the end of the second academic year of enrollment. All continuing federal aid recipients must maintain a minimum 2.0 g.p.a.

For transfer students, hours accepted by Ohio University will be included as part of the maximum time frame toward the completion of a degree or certificate. For re-enrolling students, their prior Ohio University hours are considered for determining satisfactory academic progress. Students who attend summer quarter will have the time frame and hours attempted counted for that quarter.

In the event of repeated courses, only the final hours count toward the completion of a degree or certificate. Incomplete courses are counted in the g.p.a. and maximum time frame requirements once they are completed. Proper withdrawal from classes prior to the 14th day of enrollment will not affect the fulfillment of the requirements, but attempted hours after the 14th day of enrollment will be counted. A student is allowed one complete withdrawal from the University during his/her entire undergraduate period at Ohio University.

All students are notified of their annual status after spring quarter. Students who are placed on probation are considered in "good standing" and remain eligible to receive financial aid. Students who become ineligible may appeal the decision if their failure to meet SAP criteria for satisfactory academic progress was due to mitigating circumstances. Appeal forms are available in the OSFAS and must be submitted before the end of the fourth week of the quarter.

### Scholarship Recipients

For the Athens campus, all scholarship recipients must earn at least 16 credit hours for each quarter during the academic year for which they receive funds. Similarly, recipients must meet the following minimum g.p.a. standards in order to retain the scholarships (g.p.a. will be checked after the completion of fall and winter quarters). Third Century (3.5), Presidents (3.5), John Newton Templeton (3.0), Trustees (3.0), Manasseh Cutler (3.0), Deans (3.0), Other O.U. Funded Scholarships (3.0), Corporate/Endowed (3.0), National Merit (3.0). Deans Scholarship recipients for the regional campuses must earn at least 12 credit

hours for each quarter during the academic year for which they receive the award and maintain a minimum 3.3 g.p.a. Academic requirements for other scholarship awards may vary from one regional campus to the other (contact the Student Services Office at the appropriate regional campus).

## Descriptions of Available Aid

### Gift Aid — Scholarships

Below is a listing of some of the scholarships offered. Consult the scholarship brochure, available from OSFAS, for more details.

**Third Century Scholarship.** These four-year renewable scholarships are valued at \$3,000 per year and are limited to incoming freshmen. To renew the award, recipients must maintain a 3.5 accumulative g.p.a. and earn 48 credit hours per year or 16 credit hours per quarter. Class rank and ACT/SAT test scores, recommendations, activities, interviews, and/or auditions are among the selection criteria.

**John Newton Templeton Freshman Scholarships** (Black, Hispanic, Native American). This scholarship is valued at \$3,000 per year and is awarded based on such criteria as class rank, grade-point average, honors, awards, extracurricular activities, volunteers/paid work, and ACT/SAT test scores. It is renewable for three additional years if the recipient maintains a 3.0 accumulative g.p.a. and completes at least 16 hours per quarter.

**Presidents Scholarship.** Limited to incoming freshmen, these four-year renewable scholarships are valued at \$1,500 per year. To renew the award, recipients must maintain a 3.5 accumulative g.p.a. and earn 16 credit hours per quarter. Class rank and ACT/SAT test scores, recommendations, activities, interviews, and/or auditions are among the selection criteria.

**Trustees Outstanding Scholar Awards.** These scholarships are valued at up to a maximum of \$1,500 and are awarded for high academic achievement as demonstrated by class rank, ACT/SAT test scores, recommendations, activities, interviews, and audition.

**Manasseh Cutler Freshman Scholarships.** These one-year scholarships are valued at \$1,000 and are awarded to incoming freshmen. Criteria for selection include class rank, ACT/SAT test scores, recommendations, activities, interviews, and audition.

**Minority Incentive Grant.** These \$1,000 one-year-only awards are limited to incoming minority freshmen. Selection criteria is based on PSAT test results. All minority (Black, Hispanic, Native American) freshmen will be considered automatically for this scholarship by the Office of Admissions.

**Upperclass Deans Scholarships.** These scholarships are one-year awards valued at \$750 to \$1,500 for upperclass students and transfer students who have earned more than 48 hours. Students are selected on the basis of earned hours and accumulative g.p.a. Students must reapply and compete annually for renewal.

**Special Talent Awards.** A student with exceptional talent in art, dance, forensics, music, or theater may receive a Manasseh Cutler Scholarship (freshman) or a Deans Scholarship (upperclass) for that talent. Interested students should contact the respective department for additional information.

**O.U. Minority Scholarship.** Limited to upperclass minority students, these one-year awards are valued at \$1,000. Students are selected on the basis of earned hours and accumulative g.p.a.

**Corporate Scholarships.** Available to students majoring in specific academic areas (engineering, business, sciences) on the basis of high academic achievement, these awards range from \$300 to \$2,000 per year. Eligibility normally includes demonstrated financial need, and students must reapply annually for renewal.

**Endowed Scholarships.** Available to students with high academic achievement and demonstrated financial need, these scholarships are made available from contributions of alumni and friends of Ohio University and are usually restricted by geographic locality, by major, or by some other special criteria. Awards range from \$150 to \$2,000 per year.

**National Merit Scholarships.** These scholarships are awarded to National Merit finalists who indicate Ohio University as their first-choice institution. National Merit Scholarships are four-year awards ranging in value from \$750 to \$2,000.

**Reserve Officers Training Corps Scholarships.** Scholarships ranging from one to four years are available on a competitive basis for qualified students participating in the Air Force (Aerospace Studies) or the Army (Military Science) program. These scholarships pay costs of tuition, lab fees, and a flat rate for books. In addition, recipients receive a subsistence allowance at the rate of \$100 per month for the period the scholarship is in effect. Interested students should contact the Department of Aerospace Studies or the Department of Military Science.

### Gift Aid — Grants

**Pell Grant.** The Pell Grant is an "entitlement" program from the federal government, which means that all undergraduate aid applicants who establish eligibility will receive funds based on their eligibility index, enrollment status (full-time, three-quarter time, or half-time), and the cost of education. Upon submission of an FAF, each applicant will receive a Student Aid Report (SAR) indicating a Pell Grant Index (PGI) ranging from 0 to 2000 to be converted into an award amount from a minimum of \$195 to a maximum of \$2,300. The Pell Grant serves as the foundation upon which all other aid may be added. However, ineligibility for Pell Grant funds does not automatically exclude a student from all other types of financial aid. Eligible recipients may receive funding from this program up to five years for a four-year degree program.

**Supplemental Education Opportunity Grant (SEOG).** The SEOG is a federal grant awarded to undergraduate students on the basis of exceptional financial need beyond the Pell Grant. These funds are awarded directly by the University and are limited to the funds allocated to the University by the U.S. Department of Education. Students must have completed the FAF and have demonstrated financial need. Preference is given to Pell Grant recipients. The dollar amount awarded to eligible applicants varies each year depending upon the needy student population enrolled at Ohio University.

**Ohio University Grants (OUG).** The Ohio University Grant is an institutional grant made available by the University to supplement the limited SEOG funds for needy students or students with special circumstances. Students should have completed the FAF and have demonstrated financial need. Discretionary judgments are made by the

OSFAS in awarding students who would not be able to remain in school or to graduate otherwise.

**Ohio Instructional Grant (OIG).** The OIG is a need-based state-funded grant to assist Ohio residents in meeting the cost of education. All Ohio residents who wish to be considered must complete and submit the OIG application directly to the Ohio Board of Regents. Although the deadline date is the third Friday in September, applicants are encouraged to apply as soon as the applications are available in early January. Eligible students will receive an award certificate which must be submitted to the OSFAS before the award is finalized.

### **Self-Help — Student Loans**

**Perkins Loan (formerly National Direct Student Loan).** The Perkins Loan is a federal loan for students who are enrolled in a degree program at a participating post-secondary institution. No interest is charged on the loan while the student remains in school, and the repayment period begins nine months after a student graduates, leaves school, or drops below half-time enrollment as defined by the University. Applicants must file an FAF with the College Scholarship Service. The interest rate is currently 5 percent, and loans can be included under the loan consolidation provisions contained in the Reauthorization Act. The student must sign a promissory note before a disbursement of cash or credit to the student's account can be made.

**Stafford Student Loan (formerly Guaranteed Student Loan).** The Stafford Student Loan is a need-based federal loan for students enrolled at least half-time in a certificate or degree-granting program at a participating post-secondary institution. All applicants of the Stafford Student Loan must file a need analysis form (the FAF) with the College Scholarship Service (CSS) to determine eligibility. Eligibility for the Stafford Student Loan is determined by the Congressional Methodology need analysis (see Determining Need). A separate application, available from a participating bank or other lending institution, also is required. Interest rates (for loans made for periods of enrollment after July 1, 1988) will be 8 percent for the first four years of repayment and 10 percent for the fifth and subsequent years of repayment. Loan repayment may be deferred for certain conditions, and loan consolidation is possible under the Reauthorization Act passed in October of 1986. Loan checks are made co-payable and sent to the University in two or three disbursements from the lenders. All first-time, first-year borrowers must attend an entrance interview before a disbursement can be made.

**Ohio University Loans.** Funds are made available by the University to provide short-term loans for students. These loans are available to assist students in the payment of University bills and/or educationally-related expenses, provided the student has a guaranteed source of repayment that will be available within 30 to 60 days from the date of the loan. A one-page loan application must be completed and approved prior to the issuing of a loan check. A personal interview with the coordinator of student loans may be required. Students who are in default of previous loans and/or federal loans are not eligible to receive an institutional loan. Borrowers who are not aid recipients are charged a processing fee and an interest rate of 9 percent.

**Parent Loan for Undergraduate Students (PLUS).** The PLUS Loan is a supplemental loan for parents of undergraduate students who prefer to borrow a portion of their contribution—up to \$4,000 for each undergraduate student enrolled per year. The borrower must be the natural or adoptive parent, be a U.S. Citizen, U.S. national or eligible

noncitizen, and not be in default on a student loan, or owe a refund to an educational grant program.

The PLUS Loan must be used for educational expenses at the school the student is or will be attending. Repayment begins in 60 days at a predetermined interest rate (lower than prime) each academic year. There is no federal interest subsidy on this loan. The borrower is responsible for the interest on the loan from the day the loan is disbursed.

**Supplemental Loans for Students (SLS).** Supplemental Loans for Students are for graduate and professional students, independent undergraduate students, or dependent students with extenuating circumstances as determined by the school. The amount, terms, and conditions are the same as the PLUS Loan. Applications may be obtained from a participating lender.

### **Self-Help — Employment**

**College Work Study (CWS).** This is a need-based federal program that allows students to earn a portion of their educational expenses through part-time employment. The federal government stipulates that jobs available under the CWS program may not displace presently employed persons or fill regular job openings (including student employment). Therefore, CWS jobs are used as a supplemental source of assistance by institutions. Whenever possible, CWS students are placed in positions which coincide with their career interests or academic majors. Students are paid at least the minimum wage based upon the number of hours actually worked. Most students are eligible to work 9 to 11 hours per week and are paid by check every two weeks. Students must report to the OSFAS at the opening of the first quarter they have been awarded CWS to receive their work assignments.

**Program to Aid Career Exploration (PACE).** The PACE program, co-sponsored by the OSFAS and Career Planning and Placement, is unique to Ohio University. The intent of the program is to provide students with the opportunity to earn money to help meet educational expenses while gaining career-oriented work experience. PACE students work between 5 and 15 hours per week for an hourly pay rate that is above the minimum wage. To be eligible for PACE employment, a student must meet the following requirements: (1) be an undergraduate; (2) have earned at least 30 hours; (3) have at least a 2.3 cumulative g.p.a.; (4) be in need of earnings as defined by the OSFAS; and (5) be a U.S. citizen or eligible noncitizen. PACE employment is available only to Athens campus students who are enrolled full-time and not employed in CWS.

**Centralized Student Employment Service (CSES).** Ohio University established the CSES to provide job opportunity information for all students enrolled at least half time. Its purpose is to assist in hiring students for part-time jobs, to maximize employment opportunities and job placement, and to help coordinate student employment policies and procedures. Through CSES, job opportunities are posted from all hiring departments at Ohio University (Athens campus) and for private (off-campus) employers, as well.

Job listings appear on a job board outside 020 Chubb Hall. All employment opportunities for students are posted when new positions are available and/or when vacancies occur. Students are referred to potential employers for interviews and hiring decisions. Because the job-posting service is centralized, students are assured an equal opportunity to apply for jobs. Some international students also are able to use the CSES.

**Job Location and Development (JLD).** To assist with placing students in off-campus positions, an Employment Skills/Work Experience Inventory has been designed which permits students to register their experience levels in any of 166 job categories. Lists of available students are provided to potential employers free of charge and include the names, phone numbers, addresses, and experience levels of all students in that job category. For details, please contact the Office of Student Financial Aid and Scholarships.

## Services to Students

Walk-in services are available to all students from 9 a.m. to noon and 1 p.m. to 4 p.m., Monday through Friday. Students may choose to meet with the administrator on-call, or they may request to schedule an appointment with their assigned counselor. Counselor assignments are made alphabetically according to the student's last name. Some of the services provided by the counselors are: (1) confirmation of financial aid for preregistration, (2) a review of financial need and eligibility, and (3) a review of policies and procedures for the different types of financial aid programs.

More detailed information regarding any of the financial aid programs and/or scholarships may be obtained by contacting the Office of Student Financial Aid and Scholarships at 020 Chubb Hall, Athens OH 45701-2979 or by calling 614-593-4141 Monday through Friday from 9 a.m. to noon and 1 p.m. to 4 p.m.

## STUDENT ACTIVITIES

The Office of Student Activities, located in Baker Center, plans, coordinates, and supports cocurricular activities on the Ohio University campus. Students are encouraged to become active in any of the many organizations or programs available. All are designed to help the individual complement his or her academic growth by being involved in campus life outside of the classroom.

**Leadership Development.** The Ohio University Leadership Development Program, coordinated through the Office of Student Activities, offers a comprehensive and integrated series of workshops, conferences, and seminars. Students who choose to become involved can learn personal, interpersonal, and organizational skills and concepts that are designed to help each individual develop his or her potential. Specific programs include decision making, goal setting, time management, problem solving, and leadership styles.

**Student Organizations.** Over 270 student organizations are registered with the Office of Student Activities. Each offers a unique opportunity for involvement. Included are honoraries, special interest groups, professional associations, political groups, governing bodies, club sports, religious groups, and service organizations.

**Greek Life.** There are 30 nationally-affiliated fraternities and sororities recognized on the Athens campus. These groups are governed by Women's Panhellenic Association, Interfraternity Council, and the Ohio University Council of National Pan-Hellenic Council. The Office of Student Activities acts as University liaison and advisor.

**Campus Activities Programming.** Many major campus events and programs are planned by the University Program Council (UPC), International Student Union (ISU), and Black Students Cultural Programming Board (BSCPB). These groups, advised by the Office of Student Activities, plan social, cultural, recreational, and entertainment pro-

grams for the campus. While providing the campus with quality activities and multicultural programs, they offer an opportunity for members to develop leadership and career-related skills. UPC is composed of eight committees: cultural, concerts, lectures, entertainment, recreation, special events, film and video, and Springfest. The BSCPB includes the following committees: hospitality, political, social, publicity, and entertainment. ISU consists of an executive board, general assembly, and programming committee.

**Minority Programming.** The Minority Programming component of the Student Activities Office offers programs in areas which meet the needs and interests of minority students. The office has regular, working contact with several offices and organizations, including the Black Student Cultural Programming Board, Black Affairs Commission of the Student Senate, Ohio University Council of National Pan-Hellenic Council, and individual black sororities, fraternities, and student organizations.

**Volunteer Services.** Students can gain valuable career, leadership, and personal development experience by volunteering in the Athens community. The Ohio University Volunteer Center, located in 033 Baker Center, promotes such involvement by producing a catalog of volunteer opportunities and helping students find the opportunity that best suits their needs.

**Publications.** The Student Activities Office publishes *How To At O.U.*, the student organization handbook; *Inside Ohio University*, the student handbook; *Campus Connection*, a newsletter for all registered student organizations; and the *Guide to Student Organizations*.

## BAKER UNIVERSITY CENTER

The John Calhoun Baker University Center is a focal point of extracurricular life at Ohio University. A variety of facilities, programs, and services are provided to the University community.

**The Recreation Room,** located on the basement level, has eight regulation bowling lanes, 15 pool tables, a snooker table, and a wide variety of video and pinball games.

**The Front Room,** a campus coffeehouse, serves domestic, imported, and specialty coffees as well as tea, soda, seltzers, and juices. Also featured are Haagen-Daz ice cream, dessert croissants, and premium locally-produced baked goods. Open seven days a week (until midnight Sunday through Thursday and 1 a.m. Friday and Saturday), it's a popular place to meet friends and attend events. Activities are planned for every night and include the Front Room Free Fun Film Series (on Mondays and Tuesdays), dance nights, talent shows, Midnite Movies (on Fridays), Comedy Class Live, improvisational theater, and live performances by local and regional jazz, rock, country, and rhythm and blues artists.

**Suzi Greentree's** is a popular campus eatery that features pizza, subs, and natural foods including a salad bar, baked potatoes and skins, hot pretzels, bagels, nachos, and frozen yogurt. Located on the ground floor across from the Front Room, Suzi's is open for breakfast, lunch, and dinner as well as late-night snacking.

**The State Room Dining Room,** located on the first floor, serves lunch daily. Also available are private dining rooms for luncheon meetings and a full-line catering service.

**The Information Center** in the main lobby offers a computerized campus calendar listing University events, programs, and academic information, check cashing, notary public services, a Bank One automatic teller, typewriter rental, free telephones for local calls, paper and pen sales, postage stamps, photocopying, and up-to-date list-



ings of students, faculty, staff, organizations, departments, and committees. Adjacent to the lobby are the 1954 lounge with a large-screen television and the 1804 Lounge with a grand piano. Ride and housing boards and coin-operated lockers are also available.

**Meeting and reception facilities** are available in Baker Center for groups from 10 to 500. Reservations can be made at the Director's Office, Room 204. Baker Center also houses the Office of Student Activities and the following student organizations:

Nontraditional Students Organization .....	314
Athena Yearbook .....	320
Black Students Cultural Programming Board .....	419
Interfraternity Council .....	312
International Student Union .....	425
National Pan-Hellenic Council .....	313
<i>The Post</i> .....	Ground floor
Student Activities Commission .....	311
Student Senate .....	309

Students Defending Students .....	413
University Program Council (UPC) .....	406
Women's Panhellenic Association .....	312

## STUDENT SENATE

Student Senate is the elected, representative voice of the student body and is part of the network of campus governmental bodies that also includes the Administrative Senate, Faculty Senate, and Graduate Student Senate. Student Senate initiates programs and coordinates activities deemed beneficial to the welfare of students. Student Senate is responsible for the appointment of undergraduate students to university committees, and for allocating over \$135,000 a year to student organizations. Students are encouraged to contact the Student Senate for help in resolving issues, as well as for information regarding programs and projects available to them.







## Colleges and Curricula



# Majors and Programs

Ohio University offers curricula in some 250 undergraduate majors through nine colleges: Arts and Sciences, Business Administration, Communication, Education, Engineering and Technology, Fine Arts, Health and Human Services, Honors Tutorial, and University.

Following is a comprehensive listing of undergraduate majors and programs arranged by the college in which each is offered. For specific information on a particular program, see the appropriate college and/or courses section of this catalog.

## College of Arts and Sciences

Afro-American Studies  
Botany  
    Environmental Biology  
    Field Biology  
    Preforestry  
    Prep. for Advanced Training in Botany  
    Prep. for Agri-Business  
    Prep. for Applied Plant Science  
    Prep. in Cell Biology and Biotechnology  
Chemistry  
    Forensic Chemistry  
    Predentistry  
    Premedicine  
    Prepharmacy  
    Prep. for Biochemistry  
    Prep. for Environmental Chemistry  
Classical Languages  
    Latin  
Computer Science  
Economics  
    Government Foreign Service  
    Prelaw  
English  
    Creative Writing  
    Prelaw  
    Pretheology  
Environmental Studies (see Botany, Chemistry, Geography, Geological Sciences, and Zoological and Biomedical Sciences)  
Geography  
    Prep. in Cartography  
    Prep. for Environmental Geography  
    Prep. for Geographic Information Systems Analyst  
    Prep. for Meteorology  
    Prep. for Urban and Regional Planning  
Geological Sciences  
    Prep. for Environmental Geology  
Water Resources  
History  
    Government Foreign Service  
    Prelaw  
    Pretheology  
International Studies  
Linguistics  
Mathematics  
    Prep. for Actuarial Sciences  
    Prep. for Advanced Training in Mathematics  
    Prep. in Applied Mathematics  
    Prep. for Meteorology  
Modern Languages  
    French  
    German  
    Spanish

Philosophy  
    Prelaw  
    Pretheology  
Physics  
    Prep. for Advanced Training in Astronomy  
    Prep. for Advanced Training in Physics  
    Prep. in Applied Physics  
    Prep. for Meteorology  
Political Science  
    Government Foreign Service  
    Prelaw  
    Prep. for Public Administration  
Psychology  
    Prephysical Therapy  
Social Work  
Sociology and Anthropology  
    Anthropology  
    Prelaw  
    Prep. for Criminology  
    Sociology  
Zoological and Biomedical Sciences  
    Environmental Biology  
    Medical Technology  
    Microbiology  
    Predentistry  
    Premedicine  
    Preoptometry  
    Prep. for Exercise Physiology  
    Prep. for Marine or Freshwater Biology  
    Prep. for Nutrition  
    Prep. for Wildlife Biology  
    Prepharmacy  
    Prephysical Therapy  
    Preveterinary Medicine  
    Zoology  
Undecided

## College of Business Administration

Accounting  
Business Economics  
Business Prelaw  
Finance  
General Business  
Health Care Management  
Human Resource Management  
International Business  
Management  
Management Information Systems  
    Data Processing Track  
    Departmental Systems Track  
Marketing  
Production Management  
Quantitative Business Analysis  
Small Business Entrepreneurship  
Undecided

## College of Communication

Communication Systems Management  
Interpersonal Communication  
    Communication in Human Services  
    Communication Theory  
    Legal Communication  
    Organizational Communication  
    Political Communication  
Journalism  
    Advertising Management

Broadcast News  
Magazine Journalism  
News Writing and Editing  
Public Relations  
Photojournalism (co-administered by the School of Visual Communication)  
Telecommunications (Radio-Television)  
Visual Communication<sup>1</sup>

<sup>1</sup>A major in these areas may be pursued in either of two colleges. The applicant should consult the University *Undergraduate Catalog* for a complete description of degree requirements.

## College of Education

Art Education  
Bookkeeping - Basic Business  
Business Education - Comprehensive<sup>1</sup>  
Communication - English Emphasis  
Communication - Speech Emphasis  
Educational Media Certification  
Elementary Education  
Early Childhood/Primary Education  
English  
General Speech - Interpersonal Communication Emphasis  
General Speech - Theater Emphasis  
Health Education<sup>2</sup>  
Latin  
Mathematics  
Media - Noncertification  
Middle School Education - Elementary  
Middle School Education - Secondary  
Modern Languages  
    French  
    German  
    Spanish  
Music Education  
    Instrumental Emphasis  
    Vocal Emphasis  
Physical Education  
    Elementary and Secondary<sup>2</sup>  
School Nurse<sup>2</sup>  
Science  
    Biological Science  
    Chemistry  
    Earth Science  
    Physics  
Social Studies Comprehensive  
Special Education  
    Developmentally Handicapped/Severe Behavior Handicapped  
    Developmentally Handicapped/Specific Learning Disabilities  
    Hearing and Speech Therapy  
    Multihandicapped  
Vocational Home Economics Education  
    Consumer & Homemaking<sup>2</sup>  
    Job Training—Child Care Services<sup>2</sup>  
    Job Training—Food Services<sup>2</sup>  
    Job Training—Home & Community Services<sup>2</sup>

<sup>1</sup>Not all required courses are offered on Athens campus. Applicants should consult the University *Undergraduate Catalog* for details.

<sup>2</sup>These majors are offered in both the College of Education and the College of Health and Human Services. Students interested in these majors

should apply initially to the College of Health and Human Services. Students pursuing these majors will receive teacher certification regardless of the college in which they enroll.

### College of Engineering and Technology

Airway Science  
Chemical Engineering  
Civil Engineering  
(specializations in environmental engineering, geotechnical engineering, and structural mechanics and design)  
Electrical Engineering  
(technical electives in avionics, circuit design, communications, computers and automata, control systems, electromagnetics, electronics and instrumentation, energy sources and systems, and power transmission and distribution)  
Industrial and Systems Engineering  
Industrial Technology  
(specializations in business management, manufacturing, teaching, and technical areas)  
Mechanical Engineering  
(specialization in energy, machine design)  
Undecided

### College of Fine Arts

Art  
Art Premajor (majors include art education, art history, ceramics, graphic design, painting, photography, printmaking, sculpture, and studio arts)  
Art Therapy  
Art Therapy Premajor  
Dance  
Music  
Music Education  
Music Education - Music Therapy  
Music History and Literature  
Music Theory and Composition  
Music Therapy  
Orchestral Instruments  
Organ Performance  
Piano Performance  
Voice Performance  
Theater  
Acting  
Production Design and Technology  
Theater Arts and Drama  
Visual Communication<sup>1</sup>  
Informational Graphics  
Multi-Media  
Picture Editing  
Photo Communication  
Photo Illustration  
B.F.A. with Dual Emphasis

<sup>1</sup>A major in these areas may be pursued in either of two colleges. The applicant should consult the *University Undergraduate Catalog* for a complete description of degree requirements.

### College of Health and Human Services

Health and Sport Sciences  
Health Sciences  
Athletic Training<sup>1</sup>  
Athletic Training/Community Health Services

Athletic Training/Exercise Physiology  
Athletic Training/Health Education  
Community Health Services  
Environmental Health Science  
Health Education<sup>2</sup>  
Health Services Administration  
Industrial Hygiene  
Long-Term Health Care Administration  
Physical Education<sup>2</sup>  
Recreation Studies  
Outdoor Education  
Recreation Management  
Recreation - Special Interests  
Recreation - Wilderness Skills  
Therapeutic Recreation  
Sport Sciences  
Aquatic Management  
Coaching  
Exercise Physiology  
Sport Industry  
Sport for Special Populations  
Youth Sports  
General/Undecided  
Hearing and Speech Sciences<sup>2</sup>  
Home Economics  
Family Studies and Community Services  
Early Childhood Education  
Early Childhood Education/Primary Education<sup>2</sup>  
Family Studies  
Vocational Home Economics Education  
Consumer and Homemaking<sup>2</sup>  
Job Training - Child Care Services<sup>2</sup>  
Job Training - Food Service<sup>2</sup>  
Job Training - Home and Community Services<sup>2</sup>  
Food and Nutrition  
Dietetics and Community Nutrition  
Food Service Management  
Nutrition with Science  
Interior Design  
Textiles and Clothing  
Fashion and Retail Merchandising  
Nursing  
Bachelor of Science in Nursing<sup>3</sup>  
School Nurse Program<sup>2</sup>  
Physical Therapy<sup>4</sup>  
Undecided

<sup>1</sup>Applicants to athletic training must meet special selective requirements and submit additional credentials after applying to the University. See the *University Undergraduate Catalog* for details.

<sup>2</sup>These majors are offered in both the College of Health and Human Services and the College of Education. Students interested in these majors should apply initially to the College of Health and Human Services. Students pursuing these majors will receive teacher certification regardless of the college in which they enroll.

<sup>3</sup>Available only to registered nurses.

<sup>4</sup>Must enter through science preparatory program. See *University Undergraduate Catalog*.

### Honors Tutorial College<sup>1</sup>

Botany  
Chemistry  
Dance  
Economics  
Engineering Physics

English  
Film  
French  
Geography  
Hearing and Speech Sciences  
History  
Interpersonal Communication  
Journalism  
Management  
Mathematics  
Philosophy  
Physics  
Political Science  
Psychology  
Sociology  
Spanish  
Telecommunications  
Theater  
Zoology and Biomedical Sciences

<sup>1</sup>The Honors Tutorial College has special requirements for entrance, and an applicant must obtain approval for acceptance.

### University College

#### Associate Degrees by Campus

Athens Campus  
Associate in Arts<sup>1</sup>  
Arts and Humanities Emphasis  
Social Science Emphasis  
Child Development  
Associate in Science  
Associate in Applied Science  
Aviation Technology  
Chillicothe Campus  
Associate in Applied Business  
Business Management Technology  
Office Administration Technology  
Associate in Applied Science  
Human Services Technology  
Law Enforcement Technology  
Security/Safety Technology  
Lancaster Campus  
Associate in Applied Business  
Accounting Technology  
Business Management Technology  
Office Management Technology  
Associate in Applied Business or Science  
Computer Science Technology  
Associate in Applied Science  
Electronics Technology  
Industrial Technology  
Zanesville Campus  
Associate in Applied Science  
Nursing, RN  
Radio-Television  
Associate in Individualized Studies<sup>2</sup>  
Baccalaureate Degrees  
Bachelor of Criminal Justice<sup>3</sup>  
Bachelor of Specialized Studies<sup>4</sup>  
Exploratory

<sup>1</sup>Available on all campuses.

<sup>2</sup>Available on Athens, Chillicothe, Lancaster, and Zanesville campuses. Applicants must have 30 hours to apply and obtain approval for acceptance. Not open to freshmen.

<sup>3</sup>Requires an associate degree in an area related to criminal justice. Not open to freshmen.

<sup>4</sup>Applicants to the Specialized Studies Program must obtain approval for acceptance. Not open to freshmen.

# College of Arts and Sciences

F. Donald Eckelmann, *Dean*  
 Harold Molineu, *Associate Dean*  
 Alice O. Kemmerle, *Assistant Dean*  
 Joyce Z. Kohan, *Assistant Dean*  
 Paul Solyn, *Assistant Dean*

## THE COLLEGE

Ohio University remained a liberal arts college for almost one hundred years after it was founded. With the expansion of curricula and organization of new colleges and divisions during the last 85 years, the College of Arts and Sciences has held to what has been the central purpose of the college since 1804: to provide opportunities for the student to secure a sound liberal education. A liberal education provides the opportunity to acquire knowledge from a broad-based background as well as the depth of a major program. It prepares the student for advanced graduate or professional training and in many cases for a more immediate vocation. In step with the changing needs of our society, the college has maintained the central purpose of a liberal education as a sound basis for training while providing special curricula and area studies based on research and geared to today's career opportunities.

These objectives are achieved through the courses which make up the curricula of the college — courses which historically have been regarded as the means whereby people have come to understand themselves and the world in which they live. These courses have taken a place in our academic disciplines as the result of today's technological and scholarly advances. The student gets specialized knowledge in some particular field through major requirements and also gets a fundamental education in foreign languages and other humanities, social sciences, and natural sciences. In line with these goals, the following pages illustrate that the A.B. and B.S. degrees require specific courses in the major area. Beyond this, and with the University's General Education Requirements as a foundation, the degree requirements are designed in order for students to familiarize themselves with the languages, humanities, social sciences, and natural sciences as separate areas but with considerable freedom of choice within the areas. In addition, most programs allow for as much as a full year of elective study.

The College of Arts and Sciences is the largest and oldest college at Ohio University. Comprising 20 departments, the college offers 26 regular major programs; 22 minors; 53 special programs which prepare for specific, career-related goals; and 6 majors arranged in cooperation with other

colleges. As part of any of the major programs, the student may select a minor from those offered by most departments in the college, or the student may choose to complete a formal minor in business administration. The college also offers a certificate in women's studies, in political communication, and, in cooperation with the College of Health and Human Services, a certificate program in rural gerontology. These can be part of any program offered by the University.

## DEPARTMENTS

The College of Arts and Sciences comprises the following 20 academic departments:

- Afro-American Studies
- Botany
- Chemistry
  - Forensic Chemistry
- Classical Languages
  - Classical Archaeology and Antiquities
  - Greek
  - Latin
- Computer Science
- Economics
- English Language and Literature
  - Creative Writing
  - Great Books
- Geography
  - Cartography
  - Meteorology and Climatology
- Geological Sciences
- History
- Linguistics
  - Arabic
  - Chinese
  - Indonesian/Malaysian
  - Japanese
  - Swahili
- Mathematics
- Modern Languages



French  
 German  
 Italian  
 Russian  
 Spanish  
 Language Laboratory  
 Philosophy  
 Physics and Astronomy  
   Astronomy  
   Physical Sciences  
   Physics  
 Political Science  
   Public Administration  
 Psychology  
 Social Work  
 Sociology and Anthropology  
 Zoological and Biomedical Sciences  
   Microbiology  
   Zoology

The college also includes the following eight programs:

The Institute for Local Government Administration and Rural Development  
 The Master of Arts in Public Administration Program  
 The Master of Environmental Studies Program  
 The Master of Social Studies Program  
 The Ohio Program of Intensive English (OPIE)  
 The Ph.D. in Molecular and Cellular Biology Program  
 The Rural Gerontology Program  
 The Women's Studies Program

Master's and doctoral degree programs are offered by the departments of Botany, Chemistry, English Language and Literature, History, Mathematics, Physics and Astronomy, Psychology, and Zoological and Biomedical Sciences. Master's degree programs are offered by Economics, Geography, Geological Sciences, Linguistics, Modern Languages, Philosophy, Political Science, and Sociology and Anthropology.

Information about the master's and doctoral programs can be found in the Ohio University *Graduate Catalog*.

## DEGREES, MAJORS, AND MINORS

The college offers two four-year degrees — the Bachelor of Arts (A.B.) and the Bachelor of Science (B.S.).

A major for the A.B. degree may be completed in the following areas:

Afro-American Studies  
 Anthropology  
 Botany  
 Chemistry  
 Classical Languages  
 Computer Science  
 Economics  
 English Language and Literature  
 Geography  
 Geological Sciences  
 History  
 International Studies  
 Linguistics  
 Mathematics  
 Modern Languages  
   French  
   German  
   Spanish  
 Philosophy  
 Physics  
 Political Science  
 Psychology  
 Social Work  
 Sociology  
 Zoology

See the Courses of Instruction section in the back of this catalog for the major requirements.

Arts and Sciences students may complete majors in the following schools, which are not in the College of Arts and Sciences: Art, Home Economics, interpersonal Communication, Journalism, Music, and Theater.

Entry into these programs is by special arrangement and requires the permission of the director of the appropriate school. Existing selective admission policies apply regardless of the college of enrollment. Information concerning the requirements for these majors can be obtained from the dean's office.

A major for the B.S. degree may be completed in the following areas (note that the B.S. degree may not be earned for a major in the humanities or social sciences):

Botany  
 Chemistry  
 Computer Science  
 Forensic Chemistry  
 Geography  
 Geological Sciences  
 Mathematics  
 Microbiology  
 Physics  
 Zoology

See the Courses of Instruction section in the back of this catalog for the major requirements.

The college offers certificate programs in gerontology (in cooperation with the College of Health and Human Services), political communication, and women's studies. These can be part of any program in the University, regardless of the college in which the student is enrolled. The awarding of the certificate is recorded on the student's permanent record. See the Arts and Sciences Special Curricula section for the requirements for these programs.

The college offers formal minors in the following areas. The minor in business administration is offered in cooperation with the College of Business Administration. The other minors represent departments within the College of Arts and Sciences. See the Arts and Sciences Special Curricula section for the business administration minor requirements and the Courses of Instruction section for the other minor program requirements.

### Minors

Afro-American Studies  
 Anthropology  
 Botany  
 Business Administration  
 Chemistry  
 Computer Science  
 Economics  
 English  
 Geography  
 Geological Sciences  
 History  
 Linguistics  
 Mathematics  
 Microbiology  
 Modern Languages  
 Philosophy  
 Physics  
 Political Science  
 Psychology  
 Social Service  
 Sociology  
 Zoology

## SPECIAL CURRICULA

The college offers special curricula in the following:

Preparation for Actuarial Sciences  
 Preparation for Advanced Training in Astronomy  
 Preparation for Advanced Training in Botany  
 Preparation for Advanced Training in Mathematics  
 Preparation for Advanced Training in Physics  
 Preparation for Agri-Business  
 Preparation in Applied Mathematics  
 Preparation in Applied Physics  
 Preparation in Applied Plant Sciences  
 Preparation for Biochemistry  
 Minor in Business Administration  
 Preparation in Cartography  
 Preparation for Cell Biology and Biotechnology  
 Preparation in Creative Writing  
 Preparation for Criminology  
 Preparation for Dentistry  
 Preparation for the Study of the Environment  
 Preparation for Exercise Physiology  
 Preparation for Field Biology  
 Preparation for Forestry  
 Preparation for Geographic Information Systems Analyst  
 Gerontology Certificate Program  
 Preparation for Government Foreign Service  
 Preparation for Law  
 Preparation for Marine and Freshwater Biology  
 Preparation for Medical Technology  
 Preparation for Medicine  
 Preparation for Meteorology  
 Preparation for Optometry  
 Preparation for Pharmacy  
 Preparation for Physical Therapy  
 Political Communication Certificate Program  
 Preparation for Public Administration  
 Preparation for Theology and Religion  
 Preparation for Urban and Regional Planning  
 Preparation for Veterinary Medicine  
 Preparation for Water Resources  
 Preparation for Wildlife Biology  
 Women's Studies Certificate Program  
 Preparation for Zoology - Nutrition

See the Arts and Sciences Special Curricula section for information about these programs.

## DEGREE REQUIREMENTS — Bachelor of Arts and Bachelor of Science

Regardless of the major they are completing, all Arts and Sciences degree students follow a basically consistent outline to determine the requirements for a particular program.

The general requirements for the A.B. or B.S. degree are a total of at least 192 quarter hours, with at least 90 hours in Arts and Sciences coursework above the freshman level (numbered 200 or above), including two years of foreign language; at least 18 hours each of humanities, social sciences, and natural sciences; the University Tier I, Tier II, and Tier III General Education Requirements\*; and the requirements for the chosen major as stipulated by the appropriate department. Minors are optional. The A.B. and B.S. degree programs differ only in the language requirements (see language requirement section below) and in the specific major requirements as designated by the individual departments. Note that the A.B. or the B.S. degree is not the student's choice, but is determined by the program selected.

A student entering the College of Arts and Sciences is assigned a faculty advisor. The student's schedule must be carefully planned because some courses are taught only during certain quarters and/or in alternate years. Advisors assist in the preparation of a schedule each quarter so that the proper sequences of courses in the major and appropriate related courses are selected. **HOWEVER, THE STUDENT IS RESPONSIBLE FOR SEEING THAT ALL REQUIREMENTS FOR THE DEGREE ARE BEING MET.**

The following pages describe the details of these requirements in the order listed.

1. Major Requirement
2. Minor Requirement
3. General Education Requirements
4. Foreign Language Requirement
5. Humanities Area Requirement
6. Social Sciences Area Requirement
7. Natural Sciences Area Requirement
8. Level of Study Requirement (Hours above 200)
9. Total Hours Required and Credit Allowed
10. Single Application of Credit
11. Averages Required
12. General Degree Information
  - a. Advising
  - b. Degree in *Absentia*
  - c. Double Major
  - d. Pass/fail
  - e. Second Bachelor's Degree
  - f. Teacher Certification
  - g. Time and Resident Course Load Limitations
  - h. Transfer and Transient Study

\*NOTE: Courses used to fulfill Tier II requirements in many cases can be applied simultaneously toward fulfillment of the Arts and Sciences distribution requirements.

### 1. Major Requirement

The specific requirements for each major in the departments in the College of Arts and Sciences are indicated in the Courses of Instruction section of this catalog. Special requirements for the preprofessional areas (preparation for medicine, preparation for law, etc.) are explained in the Special Curricula section which follows.

The student interested in one of the special curricula must complete the entire special curriculum as indicated, taking care also to see that the University General Education Requirements as well as the regular degree requirements of language, humanities, social sciences, natural sciences, and 200-level hours are completed. The student who wishes to complete the regular departmental program should disregard the special curricula and refer to the appropriate major requirements in the Courses of Instruction section of this catalog. Requirements for the non-Arts and Sciences cooperative major programs are determined by a special advisor in each department and can be obtained from the office of the dean.

College policy requires that each department's major program consist of a minimum of 36 quarter hours in one subject area. This includes nine quarter hours which must be taken at the junior-senior level. Specific departmental requirements also must be met. It should be noted that most departments require more than 36 hours for the major, and that the student *must fulfill the major requirements stipulated by the department.*

Methods courses are not included in the major. The A.B. degree candidate can count a maximum of 72 hours in one subject toward the degree; the B.S. degree candidate may count a maximum of 80 hours.

Formal majors in the Arts and Sciences disciplines may be completed only by students enrolled in the College of Arts and Sciences. Exceptions are teacher certification candi-

dates, who may enroll either in the College of Arts and Sciences or the College of Education, and economics majors, who may enroll either in the College of Arts and Sciences or the College of Business Administration.

## 2. Minor Requirement

The Arts and Sciences student is not required to complete a minor. However, the college offers formal minors in a number of the regular major areas (see Degrees, Majors, and Minors, preceding). These minors are available to all Arts and Sciences students regardless of majors. With approval of the appropriate dean, students in other colleges can earn these minors. Also available to students in the College of Arts and Sciences is a formal minor in business administration.

College policy requires that a minor consist of a minimum of 24 hours and a maximum of 35 required hours, including at least two courses at the junior-senior level. In the case of foreign languages, the minimum requirement is 24 hours beyond 213, and, for English, courses fulfilling the composition requirement do not count as part of the minor. Within these limits, the distribution of courses is determined by the department. See the Special Curricula section which follows for the business administration minor requirements and the Courses of Instruction section for the Arts and Sciences minor requirements.

## 3. General Education Requirements

The University General Education Requirements are roughly similar to, but lesser in scale than, the A.B. and B.S. degree requirements. The well-advised student can select coursework which simultaneously will fulfill the University General Education Requirements and partially fulfill the Arts and Sciences degree requirements in foreign languages, humanities, social sciences, natural sciences, and hours-above-200. The student should bear in mind that only the courses listed in items 4,5,6,7, and 8 below will apply to the Arts and Sciences area (distribution) requirements. However, many of these courses apply also to the University General Education Requirements. The student can plan for simultaneous completion of these requirements by carefully selecting courses which appear in item(s) 4,5,6, or 7 below and in the General Education Tier II list in the Graduation Requirements section of this catalog. Courses appearing only in the Tier II list do not apply to the Arts and Sciences degree requirements.

English courses fulfilling the freshman composition requirement do not apply to the humanities area requirement. ENG 150, a remedial course, will be recommended to some students as the result of their performance on the placement tests. In this case, the regular two-course composition requirement must be completed after the successful completion of ENG 150. Credits earned for ENG 150 will apply as electives toward the required minimum of 192 hours, but will not apply to any other requirement. Courses which can fulfill the University Tier I quantitative skills, freshman composition, and the Tier III requirements do not apply to the Arts and Sciences area (distribution) requirements. All courses within the College of Arts and Sciences which are numbered 200 or above will apply to the hours-above-200 requirement.

Transfer students who receive transfer credit for comparable courses have no additional composition requirement. Those without comparable courses must complete the requirement as described above.

Arts and Sciences courses fulfilling the junior-level composition requirement will apply to the Arts and Sciences distribution requirements as listed in items 5, 6, and 7 below. Credits earned for MATH 101, a remedial course, will apply as electives toward the required minimum of 192 hours, but will not apply to any other requirement.

## 4. Foreign Language Requirement

Courses taught at Ohio University which may be used to fulfill the language requirement are the African and Asian languages (Arabic, Chinese, Indonesian/Malaysian, Japanese, and Swahili), the classical languages (Greek and Latin), Germanic language (German), Romance languages (French, Italian, and Spanish), and Slavic language (Russian).

In each case, the numbers 111, 112, and 113 represent the first (beginning) year of the language and 211, 212, and 213 represent the second (intermediate) year.

The type of degree (A.B. or B.S.) determines the foreign language requirement. Whether the student is working toward an A.B. or B.S. degree is decided by the major program, not by the student's choice.

### Candidates for the A.B. Degree

The A.B. degree foreign language requirement is a complete two-year sequence through 213.

Two years of high school language can be equivalent to one year of college language. The student who has completed two or three years of one language in high school and who wishes to complete the requirement in that language may do so according to the instructions in the Language Placement Table at the end of this section.

A student who has completed four or more years of one foreign language in high school may complete the foreign language requirement by passing course number 213, or any higher level course in that language. The student with four years of Latin in high school may elect to complete LAT 351 rather than 213. Of these, 351 is recommended.

### Candidates for the B.S. Degree

The B.S. degree candidate may meet the foreign language requirement with proficiency in foreign language(s) equivalent to two years of college study. To determine individual requirements, the student should bear in mind that two years of high school study in a single language are considered equivalent to one year of that language at the college level. Therefore, the student who enters college with two years of preparation in each of two languages or four years in a single language may consider the requirement for the B.S. degree already filled. The student who has had two high school years in only one language may complete the requirement by taking the college intermediate year (211, 212, and 213)\* in the same language or by taking the beginning year (111, 112, and 113) in a second language.

\*NOTE: Completion of the college-level beginning year of a language taken for two or three years in high school does not complete the requirement and bypassing sequential courses is permitted only in accordance with the Language Placement Table.

### Candidates for Either Degree

There are a limited number of major programs that offer both the A.B. and B.S. degrees (see listing in the Degrees, Majors, and Minors section under the College of Arts and Sciences). For these programs, the student may choose whether to pursue the A.B. or B.S. degree.

### Language Placement Table

The student is advised to begin college work in a foreign language according to the table below, and is not permitted to begin at a level *higher* than that indicated by this table. These recommendations assume that the student has had thorough foreign language preparation *within the last year*. If that is not the case, then the student is strongly advised to enroll in a lower level course. The student will not lose credit if it is necessary to repeat high school-level work (i.e., courses 111-213). Courses taken to fulfill the language

requirement, including courses in the same language(s) which repeat high school work, may not be applied to the humanities requirement.

Years of language  
in high school:

Begin college language at:

0-1 year ..... Course 111.  
2-3 years ..... Course 211.  
4-5 years .. Course 213 or 341 (In the case of Latin, 351).

### International Students

Upon entering Ohio University, an international student whose native language is not English may satisfy the foreign language requirement by demonstrating competence in English. This must be approved by the director of the Ohio Program of Intensive English and generally requires the completion of at least one course in English as a foreign language. In some cases the student must seek from the chair of the Department of Linguistics certification of his or her acceptable level of ability in a non-English language. The student also may satisfy the foreign language requirement by taking a foreign language other than his or her own.

Enrollment in beginning or intermediate level languages in one's native language(s) is not permitted. Credit will be disallowed for any courses completed in this circumstance.

### 5. Humanities Area Requirement\*

The humanities requirement may be met by a selection of 18 quarter hours from two or more areas, with at least eight hours in one area, from among the following:

- a. AAS 110, 150, 210, 211, 250, 310, 350, 355, 356
- b. art history
- c. classical archaeology (listed under Foreign Languages & Literature)
- d. comparative arts
- e. Dance Cultures of the World (DANC 351, 352, 353); History of Dance (DANC 471, 472, 473); and Viewing 20th-Century Dance (DANC 170 and 370)
- f. English courses *except* ENG 150, 151, 152, 153, 153A, 153B, 450A & B.
- g. foreign language courses other than those used to complete the foreign language requirement
- h. Foreign Literatures in English (FL) and Classical Languages in English (CLNG)
- i. Greek and Latin Words in the English Language (CLNG 127)
- j. HUM 107, 108, 109, 117, or 307, 308, 309 (Great Books)
- k. HIST 121, 122, 123, 314A-F, 328, 329A-C, 330, 331, 351, 352, 353A-B, 354, 356A-C, 357, 370, 389
- l. INCO 351, 352, 353 Rhetoric
- m. THAR 270, 271, 272 History of Theater
- n. philosophy *except* 120
- o. music history and literature

### 6. Social Sciences Area Requirement\*

The social science requirement may be met by a selection of 18 quarter hours from two or more areas, with at least eight hours in one area, from among the following:

- a. AAS 101, 202, 220, 225, 340, 341, 360, 368, 440

- b. anthropology *except* 201, 492, 496
- c. BUSL 255, 370, 442, and 475
- d. economics
- e. geography *except* 101, 302, 303, 411
- f. history *except* those listed under No. 5 k
- g. INST 103, 113, 121
- h. linguistics
- i. political science
- j. psychology *except* 212, 226, 314, 321, and 121
- k. social work
- l. sociology

### 7. Natural Sciences Area Requirement\*

The natural science requirement may be met by a selection of 18 quarter hours from two or more areas, with at least eight hours in one area, from among the following:

- a. anthropology 201, 492, 496
- b. astronomy
- c. botany
- d. chemistry *except* 115
- e. computer science *except* 120, 135, and 220
- f. GEOG 101, 302, 303, 411
- g. geological sciences
- h. mathematics *except* 101, 113, 115, 117, 118, 120, 121, 122, 151, and 320
- i. microbiology
- j. physical sciences
- k. PSY 212, 226, 314
- l. physics
- m. zoology

NOTE: Methods courses are not applicable to the area requirements.

\*The above listings (Items 5, 6, and 7) must be used as the official guide for the completion of the Arts and Sciences area (distribution) requirements.

Some courses from these categories may be applied also to the University General Education Tier II (breadth of knowledge) requirements. However, the three Arts and Sciences area categories differ in scope from the five Tier II groupings (Fine Arts and Humanities, Natural Science and Mathematics, Applied Science and Technology, Social Science, and Third World Cultures). A student wishing to select a course that will apply simultaneously to both the Arts and Sciences and the Tier II General Education Requirements must take care to choose a course which has been approved for the desired category in both the college and the University requirements. (The list of courses approved for each of the Tier II categories appears at the end of the University Graduation Requirements section of this catalog.) Note that courses which can fulfill the University Tier I quantitative skills and freshman composition requirements and the Tier III requirement do not apply to the Arts and Sciences area (distribution) requirements.

Exceptions to the Arts and Sciences area requirements or consideration for inclusion of courses not listed are not made on an *ad hoc* basis, but rather require formal approval of the Arts and Sciences Curriculum Committee.

### 8. Level of Study Requirement (Hours Above 200)

Within the total hours applied to the degree, at least 90 quarter hours of Arts and Sciences (liberal arts) courses must be above the freshman level; that is, they must be numbered 200 or above. Arts and Sciences courses are defined as Tier III courses taught by Arts and Sciences departments and those courses listed under humanities, social sciences, and natural sciences (nos. 5, 6, and 7) above. This includes foreign language courses.

Education courses which are required for teacher certification may be applied toward the 200-level requirement after the student has met all the requirements for teacher certification.

Economics majors may apply a maximum of 15 hours from QBA 201 and any advanced offering in statistics to the 200-level requirement.

Non-Arts and Sciences courses are considered to be electives. These are not counted toward the 200-level requirement, but are counted toward graduation.

## 9. Total Hours Required and Credit Allowed

A minimum total of 192 quarter hours for credit is required for either degree. Only the final hours earned when courses are repeated count for graduation.

No more than 15 hours of coursework with CR (credit) grades may be applied to credit for graduation.

Noncredit courses (courses numbered below 100, courses completed after advanced-level work in the same field, certain technology courses, and credits duplicated by repetition of coursework) are not accepted toward the 192-hour requirement. The student should be aware that one may not repeat courses for the purpose of affecting one's grade-point average after the completion of higher-level courses in the same field. (See Credit and Grading in the Guidelines and General Information section of this catalog.) Also, coursework completed at another university cannot be used to repeat coursework taken at Ohio University.

No more than 72 hours in any one subject may be counted toward the A.B. degree; and no more than 80 hours in one subject may be counted toward the B.S. degree. See the Guidelines and General Information section of this catalog for a description of the residence requirement, which can, for some students, increase the total hours required.

## 10. Single Application of Credit

No course may satisfy more than one of the area requirements in foreign language, humanities, social sciences, natural sciences, or the major requirement. For example, a philosophy major may not apply any courses in philosophy toward the humanities requirement. (Courses required for a major but outside the major department—extradepartmental requirements—will be counted toward the area requirements.) However, the student majoring in a foreign language may apply courses at the beginning and intermediate levels of that language toward the language requirement since the language major is defined as including only those courses above the intermediate level. For teacher certification students, certain courses in the comprehensive major may fulfill requirements for the appropriate area; students will need to consult with their advisors on this point. Courses which can fulfill the University Tier I quantitative skills and *freshman* composition requirements and the Tier III requirement do not apply to the Arts and Sciences area (distribution) requirements.

## 11. Averages Required

To receive a degree from the College of Arts and Sciences, a student must have a minimum point-hour ratio (g.p.a.) of 2.0 on all of the following:

- All hours attempted at the college level.
- All hours attempted at the college level in the major.
- All hours attempted at Ohio University.
- All hours attempted at Ohio University in the major.

Only the final hours and points in repeated courses are counted for graduation. However, all courses including failures are included on the student's transcript. For re-

peated courses see the Credit and Grading section of this catalog. Note that the repeated course policy does not apply to the repetition of a course after a course for which it was a prerequisite has been completed. This restriction applies generally to repeating a course after higher-level work has been completed (see No. 9 above).

The graduation point-hour ratio is computed after deductions for repeated and noncredit courses have been made. Note also that courses taken at Ohio University and repeated at another school do not result in deduction of the first grade earned.

## 12. General Degree Information

### a. Advising

The college prepares, on a quarterly basis, current degree information for each student in the form of graduation check sheets. At advising and preregistration time each quarter, the student receives a copy of the check sheet. The student should consult departmental offices for an advising list. A conference with an advisor should occur not only during preregistration, but regularly throughout the year when assistance concerning academic requirements and plans is needed.

It is hoped that the student will develop a close relationship with the advisor concerning the student's academic program. Any arrangements deviating from the major requirements as described in the Courses of Instruction section of this catalog must be communicated to the office of the dean in writing by the department chair or the undergraduate advising coordinator for the appropriate department. The student should visit the dean's office when exceptional circumstances exist, upon referral by his or her advisor, to correct errors or change programs.

To change his or her major, the student must visit the office of the dean. When the major is changed, the advisor is changed automatically by the college. All other matters pertaining to the assignment of advisors are administered by the departmental offices.

### b. Degree in Absentia

A student who wishes to earn a degree *in absentia* must complete 144 quarter hours including the specific requirements for the chosen program at Ohio University. A point-hour ratio of 2.0 or better must be maintained on all work attempted and on all work in the major. The University General Education Requirements and all college distribution requirements must be completed, except the 200-level requirement, of which at least 45 hours must be completed. A full year's work in an accredited school of dentistry, forestry, law, medical technology, medicine, optometry, physical therapy, or veterinary medicine must be completed, and the student must be advanced without condition to the second year of training at the professional school (when the program is for two or more years). Note that the *in absentia* privilege is not available for programs in Arts and Sciences other than those listed above. For the degree *in absentia*, the student must successfully complete the professional program specified.

For the medical technology program, the student must receive the approval of the medical technology advisor; and for any other *in absentia* programs, a statement must be secured from the dean of the college before the student enters the professional school granting the degree *in absentia* privilege. The student should bear in mind that admission to the professional schools is highly competitive, requiring high-level performance in the undergraduate program.



**c. Double Major**

The completion of at least one formal major is required for a degree. The completion of a second major is an option which any Arts and Sciences student may elect. In this case, the student must complete all requirements for each Arts and Sciences major as described in the Courses of Instruction section of this catalog. Courses in either major will not apply to the area requirements, but extradepartmental requirements (such as chemistry for a zoology major) will apply to the area requirements. Also, extradepartmental requirements and area requirements need not be duplicated. For example, completing two majors does not double the humanities requirement.

**d. Pass/Fail**

Ohio University policy prohibits taking required coursework on the pass/fail basis. For the Arts and Sciences student, this means that courses which can apply to the foreign language, humanities, social sciences, natural sciences, major, minor, 200-level, and special curricula requirements cannot be taken pass/fail until those requirements are completed. This effectively limits the pass/fail option in all programs to strictly elective coursework.

The student may complete a maximum of 20 hours of free elective coursework on the pass/fail basis.

**e. Second Bachelor's Degree**

The A.B. or B.S. degree is granted only once by the College of Arts and Sciences to a given student. The student, however, may complete additional majors within the degree program or may earn both the A.B. and B.S. degrees or may earn degrees from separate degree-granting colleges. For the guidelines for earning a second bachelor's degree, see the Graduation Requirements section of this catalog. Note that the College of Arts and Sciences requires the completion of a minimum of 208 quarter hours for the second degree (16 hours beyond the 192 hours required for the first degree), including all specific requirements for both degree programs.

**f. Teacher Certification**

Students earning either Bachelor of Arts or Bachelor of Science degrees in the College of Arts and Sciences may meet the special requirements for certification to teach in the secondary schools in Ohio by completing the regular requirements for the appropriate A.B. or B.S. degree program plus the additional requirements for certification. Information about the certification requirements can be obtained from Student Services in the College of Education.

**g. Time and Resident Course Load Limitations**

The student's requirements are defined by the catalog in effect when he or she begins study at Ohio University. Upon the expiration of five years past the date of entry, the requirements become defined by the current catalog. (See the Graduation Requirements section of this catalog.)

The student should bear in mind that an average course load of 16 hours per quarter is considered the standard load for graduation after four years of full-time study. Also, the student should become familiar with the residence requirements which stipulate the minimum amount of work which must be completed at Ohio University in order to receive a degree from this institution (see the Graduation Requirements section of this catalog).

Students who have requirements which involve courses numbered below 300 should start meeting such requirements not later than the beginning of the sophomore year.

This is strongly recommended in the case of foreign language. Registration by juniors or seniors in courses numbered below 300 is discouraged and in some cases it is prohibited.

**h. Transfer and Transient Study**

To determine the transferability of credit from other institutions, the college follows the policy of accepting credit only from institutions which are accredited or are recognized candidates for accreditation by one of the regional associations as reported by the American Association of Collegiate Registrars and Admissions Officers (AACRAO). The college follows the recommendations of AACRAO in recognizing transfer credit. In the case of credit from foreign institutions and other special cases, the college accepts the recommendations of the University Examiner in the Office of Admissions.

When transfer work can be accepted according to the above conditions, the college evaluates the credits on a course-by-course basis, assigning Ohio University course numbers wherever possible. This enables the student to view the transfer credit as though it had been completed at Ohio University and thereby determine his or her status relative to completing requirements for graduation simply by becoming familiar with those requirements and deducing which ones have yet to be completed.

In the case of technical credits, which are not like most courses offered at the baccalaureate level by four-year institutions, the college evaluates these courses as technical electives (TECE) at the appropriate level and will accept up to 25 hours of technical electives in programs where there is room for free electives. These credits will apply as hours of credit toward the 192 hours required for graduation, but will not fulfill any specific degree requirements. Some of our programs have very little room for free electives and therefore the potential benefit of this coursework can be considerably less than the maximum 25 hours. In several cases, especially for programs in the humanities and social sciences, the student can take maximum advantage of the allowable credit.

The student attending a two-year school is advised to complete coursework in English composition and as many courses as possible in college-level mathematics (college algebra and above) and science (biology, chemistry, geology, and physics); humanities (English language and literature, philosophy, comparative arts); and social sciences (sociology, geography, history, political science, psychology, economics, anthropology). This will improve greatly the student's chances of being able to complete the chosen four-year program after completing the two-year program. Students also should remember that in most cases, it is not advisable to complete more than two years of work at the two-year school (96-100 credit hours) if they plan to finish the baccalaureate program with two more years of work at Ohio University.

A transfer student is required to complete at least 12 quarter hours toward the major in courses at the 300 level or above in the major department at Ohio University, with a point-hour ratio of at least 2.0. These courses should be approved by the department chair. A transfer student completing a double major is required to complete at least nine quarter hours at the 300 level or above in each of the two departments at Ohio University, with a point-hour ratio of at least 2.0 in each department. These courses should be approved by the chairs of the two departments involved.

The senior student wishing to earn credit by transient study should keep in mind that he or she must complete the final 16 hours in residence at Ohio University if 96 or more hours were previously earned in residence. If fewer than 96 hours were earned in this manner, the final residence requirement is 48 hours.

The student wishing to arrange to earn credit by transient study must secure approval from the dean prior to registering. This permits review and clarification of requirements and procedures and prevents loss of credit.

Students wishing to transfer into the College of Arts and Sciences from other colleges within Ohio University must have an accumulative g.p.a. of 2.0.

The student is encouraged to read the Graduation Requirements and Credit and Grading sections of this catalog for general University academic information, including information about General Education Requirements, the grading system, probation, credit hour loads, and residence requirements.

## SPECIAL CURRICULA

Among the special curricula which follow, the four-year degree programs represent curricula which are structured to help the student prepare for a specific application of his or her undergraduate program to a selected educational or career objective. The student completing a given program will earn the major indicated in each case. For example, the student completing a formal premedicine program will graduate with a major in chemistry-premedicine or zoology-premedicine.

To be recognized as having completed a special curriculum and to complete graduation requirements, the student must complete the entire curriculum as listed, plus additional courses as necessary to complete a total of at least 192 hours, the University General Education, and the Arts and Sciences degree requirements. Should the student elect not to complete the special curriculum, then he or she, to complete the requirements for a major, must complete the requirements for the major as indicated in the Courses of Instruction section.

### Preparation for Actuarial Sciences

(Mathematics - Actuarial Sciences Major, major code #3105)

The following program is intended to provide students with a course of study suitable for entry into the actuarial profession. A student who completes the program should be prepared to pass the first three of the ten actuarial examinations. Most students take one or two of these examinations before graduation. The program has a strong business component (with addition of MKT 301 and POM 310, it satisfies requirements for a business administration minor) and is also suitable for those students who plan to combine mathematics with a career in the business world.

#### Freshman

MATH 263A, B, C Analytic Geom. & Calc. .... 12  
MATH 250B Finite Math. .... 4  
ECON 103, 104 Prin. .... 8  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

#### Sophomore

MATH 263D Analytic Geom. & Calc. .... 4  
MATH 340 Diff. Equations .... 4  
MATH 211 Elem. Linear Algebra .... 4  
QBA 201 Intro to Bus. Stat. .... 4  
ACCT 201, 202 Fin. Acct. & Man. Acct. .... 8  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

#### Junior

MATH 450A, B, C Theory of Statistics .... 12  
CS 220 Intro to Computing .... 5  
FIN 325 Manag. Finance .... 4  
MGT 300 Management .... 4

Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

#### Senior

MATH 444 Intro to Numerical Anal. .... 4  
MATH 446 Numerical Linear Alg. .... 4  
FIN 331 Risk and Insurance .... 4  
FIN 436 Life Insurance .... 4  
MATH elective .... 4  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Preparation for Advanced Training in Astronomy

(Physics-Pre-Astronomy Major, major code #3335)

The following program will lead to the B.S. degree with a physics major and will provide the background required for admission to graduate school in astronomy.

#### Freshman

English composition .... 5  
MATH 263A\*, 263B\*, 263C\* Analytic Geom. & Calc. .... 12  
PHYS 210\* Physics Seminar .... 1  
PHYS 251\*, 252\* Gen. Phys. .... 10  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

#### Sophomore

MATH 263D\* .... 4  
MATH 340\* Diff. Equations .... 4  
MATH 410\* Matrix Theory .... 4  
MATH 440\* Vector Analysis .... 4  
MATH 441\* Fourier Analys. & Partial Diff. Equations .... 4  
PHYS 253\* Gen. Phys. .... 5  
PHYS 272\*, 273\* Electron. Lab. .... 4  
PHYS 351\*, 352\* Modern and Quantum Phys. .... 8  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

#### Junior

ASTR 300 Solar System .... 3  
ASTR 301 Stellar Evolution .... 3  
ASTR 302 Galaxies and Cosmology .... 3  
ASTR 310 Astronomy Lab.\*\* .... 1-3  
PHYS 311\*, 312\* Mechanics .... 8  
PHYS 371\* Interm. Lab. (Electrons) .... 2  
PHYS 372\* Interm. Lab. (Photons) .... 2  
PHYS 373\* Interm. Lab. (Nucleons) .... 2  
PHYS 423 Optics .... 4  
PHYS 451†, 452† Quantum Phys. .... 8  
PHYS 453 Nuclear & Particle Phys. .... 4  
English composition .... 4  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

#### Senior

ASTR 450 Studies in Astronomy\*\* .... 1-3  
PHYS 411\* Thermodynamics .... 4  
PHYS 412 Kinetic Theory & Stat. Mechanics .... 4  
PHYS 427\*, 428\*, 429† Elec. & Magnetism .... 11  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

For students in the Honors Tutorial Program, special combinations of some of the above courses are available.

\* Required for the B.S. degree in physics.

\*\*6 hours beyond 302 in combined coursework from 310 and 450 are required.

† Recommended for those physics majors wishing to pursue graduate studies in physics.

NOTE: Math and astronomy courses complete the natural sciences requirement.

### Preparation for Advanced Training in Botany

(Botany-Prep. for Advanced Training Major, major code #2116)

This program is intended for students who plan eventually to obtain advanced degrees in botany. Although the

program as outlined below is adequate for the needs of most students, all interested students should be certain to consult with an advisor in the Department of Botany for individual assistance in program planning.

#### Freshman

BOT 110, 111 Intro to Bot. ....	12
CHEM 151, 152, 153 Fundamentals of Chem. ....	15
MATH 263A, 263B, 263C Analytic Geom. & Calc. ....	12
ZOOL 171, 173 Intro to Zool. ....	6
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

#### Sophomore

BOT 307 Morph. of Algae & Bryophytes ....	6
BOT 309 Plant Systematics & Ohio Flora ....	5
BOT 310 Biol. of Fungi ....	5
CHEM 305, 306, 307, 308, 309 Organic Chem. ....	15
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

#### Junior

BOT 308 Morph. of Vascular Plants ....	6
OR	
BOT 312 Plant Anat. ....	5
BOT 331 Plant Genetics ....	5
OR	
ZOOL 325 General Genetics ....	5
BOT 424 Plant Physiology ....	6
BOT 431 Cell Biology ....	5
PHYS 201, 202, 203 Intro. to Physics ....	12
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

#### Senior

BOT 404 Undergrad. Research ....	4
BOT 412 Plant Pathology ....	5
BOT 425 Plant Ecol. ....	5
BOT 475 Plant Speciation & Evolution ....	3
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

## Preparation for Advanced Training in Mathematics

(Mathematics-Prep. for Advanced Training Major, major code #3102)

Students who envision eventually doing mathematics graduate work can ensure adequate preparation by building their programs around the basic mathematics offerings listed below. In addition, some computer science experience and coursework from the physical sciences is recommended. Interested students should consult an advisor in the Department of Mathematics for assistance in planning their programs.

#### Freshman

MATH 263A, 263B, 263C Analytic Geom. & Calc. ....	12
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

#### Sophomore

MATH 263D Analytic Geom. & Calc. ....	4
MATH 314 Elem. Abstract Algebra ....	4
MATH 340 Diff. Equations ....	4
MATH 360 Interm. Analys. ....	4
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

#### Junior-Senior

MATH 411 Linear Algebra ....	4
MATH 413A, 413B Intro to Mod. Algebra ....	8
MATH 460 A, B, C Advanced Calculus ....	12
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

The student also is encouraged to select some other 400-level mathematics electives as time and interest permit. Some suggestions are 470; 450A, B; 480A, B.

## Preparation for Advanced Training in Physics

(Physics-Prep. for Advanced Training Major, major code #3334)

This is a demanding program for students interested in eventually getting advanced degrees in theoretical or experimental physics. However, courses are included which would equip the graduate for career opportunities in industrial and government laboratories. Students should also consult the physics curricula and courses in the Courses of Instruction section of the catalog and should consult the chair about this program in their freshman year.

#### Freshman

MATH 263A*, 263B*, 263C* Analytic Geom. & Calc. ....	12
PHYS 210* Physics Seminar ....	1
PHYS 251*, 252* Gen. Phys. ....	10
CHEM 151*, 152* ....	10
English composition ....	5
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

#### Sophomore

MATH 263D* ....	4
MATH 340* Diff. Equations ....	4
MATH 440* Vector Analys. ....	4
MATH 441* Fourier Analys. & Partial Diff. Equations ....	4
PHYS 253* Gen. Phys. ....	5
PHYS 272*, 273* Electron. Lab. ....	4
PHYS 303** Digit. Comput. Methods in Phys. ....	4
PHYS 351*, 352* Modern and Quantum Physics ....	8
PHYS 423 Optics ....	4
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

#### Junior

MATH 410† Matrix Theory ....	4
MATH 470† Appld. Complex Variables ....	4
PHYS 311*, 312* Mechanics ....	8
PHYS 371* Interm. Lab. (Electrons) ....	2
PHYS 372* Interm. Lab. (Photons) ....	2
PHYS 373* Interm. Lab. (Nucleons) ....	2
PHYS 420 Acoustics (Odd years) ....	3
PHYS 453 Nuclear & Particle Phys. ....	4
English composition ....	4
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

#### Senior

PHYS 427*, 428*, 429* Elec. & Magnetism ....	11
PHYS 475** Adv. Lab. (Each of three quarters) ....	3-9
PHYS 411* Thermodynamics ....	4
PHYS 412 Kinetic Theory & Stat. Mechanics ....	4
PHYS 420 Acoustics (Odd years) ....	3
PHYS 451*, 452* Quantum Mech. ....	8
PHYS 471 Solid State Phys. ....	4
PHYS 493 Undergraduate Seminar ....	1
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

\*Required for the B.S. degree in physics.

\*\*Recommended.

†Recommended for those physics majors wishing to pursue graduate studies in physics.

## Preparation for Agri-Business

(Botany-Agri-Business Major, major code #2117)

This program is a modification of the Preparation for Environmental Biology (Botany Emphasis) program for students interested in applying their knowledge about the plant sciences and the environment to business and industrial situations.

1. Required BOT courses: 110; 111; 247; 248; 309; 312; 331 (OR ZOOL 325); 404; 412; 420; 424; 425 OR 426; 410 OR MICR 211, 212 OR MICR 411
2. Required nondepartmental courses
  - a. CHEM 151, 152, 153, 301, 302

- b. ZOOL 171, 173
- c. PHYS 201, 202, 203
- d. MATH 163A
- e. Either MATH 250B OR PSY 121
- f. Either CS 220 OR CS 230 OR CS 322
- g. GEOL 101 and three courses from the following: GEOG 101, GEOG 201, GEOG 260 OR GEOG 365, GEOG 302 OR GEOG 303, GEOG 447, GEOL 211, GEOL 310, GEOL 330
- h. Completion of the Minor in Business Administration
- i. Completion of Arts and Sciences degree requirements and University General Education Requirements.

## Preparation in Applied Mathematics

(Mathematics-Applied Major, major code #3103)

This program offered by the Department of Mathematics leads to a B.S. degree in mathematics and allows an emphasis on applications of mathematics to some other disciplines. A student in this program is encouraged to elect a secondary area of concentration in one of the areas of engineering, natural science, or social science. Many options are available. The particular program will vary with the student's interests and needs. An advisor will be assigned to assist each student in designing a suitable plan. The student should ask the chair of the Department of Mathematics for further information regarding this program. The mathematics coursework for two example study plans is given below.

**Example A:** For those whose secondary area of concentration is in economics, computer science, or industrial and systems engineering, a suggested plan includes:

### Freshman

MATH 263A, 263B, 263C Analytic Geom. & Calc. .... 12  
English composition ..... 5  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Sophomore

CS 220 or 230 Intro to Computing ..... 5  
MATH 263D Analytic Geom. & Calc. .... 4  
MATH 306 Found. of Math I ..... 4  
MATH 340 Diff. Equations ..... 4  
MATH 360 Interm. Analys. .... 4  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Junior

MATH 410 Matrix Theory ..... 4  
MATH 450A, 450B Theory of Statistics ..... 8  
English composition ..... 4-5  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Senior

MATH 442 Theory of Linear Programming & Nonlinear Programming ..... 4  
MATH 444 Intro to Numerical Analys. .... 4  
MATH 460A, 460B Adv. Calc. .... 8  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

**Example B:** For those whose secondary area of concentration is in mechanical, civil, chemical, or electrical engineering, or in chemistry or physics, a suggested plan includes:

### Freshman

MATH 250B Finite Math. .... 4  
MATH 263A, 263B, 263C Analytic Geom. & Calc. .... 12  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Sophomore

MATH 263D Analytic Geom. & Calc. .... 4  
MATH 306 Foundations of Math I ..... 4  
MATH 340 Diff. Equations ..... 4  
MATH 360 Interm. Analys. .... 4

Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Junior

MATH 410 Matrix Theory ..... 4  
MATH 440 Vector Analys. .... 4  
MATH 441 Fourier Analys. & Partial Diff. Equations ..... 4  
MATH 470 Appld. Complex Variables ..... 4  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Senior

MATH 444 Intro to Numerical Analys. .... 4  
MATH 450A, 450B Theory of Stat. .... 8  
OR  
MATH 460A, 460B Adv. Calc. .... 8

Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

## Preparation in Applied Physics

(Physics-Applied Major, major code #3332)

This four-year program offered in the Department of Physics leads to a B.S. degree in physics and allows an emphasis in experimental techniques together with engineering or other applied sciences. Such a program offers a broad basic education in several areas fundamental to present technology and is aimed at preparing students for many physics career opportunities in industry or government laboratories.

The particular sequence of courses will vary with the student's interests. The required courses in natural science, physics, and mathematics are the same as those listed under Physics and Astronomy in the Courses of Instruction section of this catalog. Students may then elect a sequence of courses in physics together with engineering, chemistry, or biology which are more applied in nature. Some examples of courses which may be included are: IT 101 and 102 — Engineering Drawing, CHE 331 — Principles of Engineering Materials, CE 423 — Continuum Mechanics, CE 340 — Fluid Mechanics, ME 407 — Fundamentals of Nuclear Engineering, CHE 433 — Physical Metallurgy, PHYS 475 — Advanced Lab, PHYS 420 — Acoustics, PHYS 471 — Solid State Physics, and PHYS 470 — Special Problems.

Interested students should consult the chair of the Department of Physics and Astronomy for assistance in planning their programs.

## Preparation in Applied Plant Sciences

(Botany-Applied Plant Sciences Major, major code #2114)

The Department of Botany offers this preprofessional program designed to provide students with a broad base for developing careers in horticulture, plant pathology, plant breeding, greenhouse management, or agricultural sciences. This program also prepares students for graduate studies in the above disciplines as well as for areas such as integrated crop management, integrated pest management, landscaping, and agronomy.

Students who wish to include a minor in business administration with this program should consult with an advisor in the Department of Botany.

1. Required BOT courses: 110, 111, 248, 309, 312, 331 (OR ZOOL 325), 410, 412, 424, 425, OR 426
2. Additional BOT courses are to be selected from the following to make a total of 55 hours in botany: 308, 310, 425 OR 426, 427, 450.
3. Required nondepartmental courses
  - a. ZOOL 171, 173, 435
  - b. CHEM 151, 152, 153, 301, 302
  - c. PHYS 201, 202
4. One of the following combinations
  - (1) MATH 163A and 163B
  - (2) PSY 121 and one course from CS 220, 230, or 322

[3] MATH 250B and one course from CS 220, 230, or 322  
e. University General Education and Arts and Sciences  
Bachelor of Science Degree Requirements.

## Preparation for Biochemistry

(Major code #3316)

This program serves students who have an interest in biological applications of chemistry (1) as a biochemist or health scientist in medicine, industry, or research, or (2) as preparation for graduate studies in biochemistry or another life science such as molecular biology, microbiology, or immunology, or (3) as preparation for combining a professional health career in medicine, dentistry, etc., with research in those fields. The curriculum selects coursework in all fundamental areas of chemical and biological sciences with special emphasis on advanced work in biochemistry including biochemical laboratory techniques, instruments, experiment design, and protocols.

### Freshman

CHEM 151, 152, 153 Fundamentals of Chem .....	15
MATH 263A, B, C, Analyt. Geom. & Calc. (strongly recommended) .....	12
OR	
MATH 163A, B Intro to Calc. ....	7
ZOOL 170, 171, 172, 173 Intro to Zool. ....	14
English composition .....	5
Arts and Sciences degree and General Education Requirements.	

### Sophomore

CHEM 241, 242 Quantitative Analysis .....	5
CHEM 305, 306, 307 Organic .....	9
CHEM 308, 309 Organic Lab .....	6
PHYS 201, 202, 203 Intro Physics .....	12
ZOOL 325 General Genetics .....	5
MATH 263D Analyt. Geom. & Calc. (if taking 263 math series) .....	4
Arts and Sciences degree and General Education Requirements.	

### Junior

CHEM 325 Instr. Analysis .....	4
OR	
CHEM 431, 434 Chem. Separation Meth. ....	4
CHEM 351 Physical Chem. ....	4
CHEM 490, 491, 492 Intro to Biochemistry .....	10
ENG 305J Technical Writing .....	4
Arts and Sciences degree and General Education Requirements.	

### Senior

BOT 450 Biotech. & Genetic Eng. ....	4
CHEM 493 Biochem. Techniques .....	2
CHEM 494 Biochem. Research .....	3
ZOOL 460 Animal Physiology .....	4

## Minor in Business Administration

Arts and Sciences students often plan careers in business, but choose their college majors because of interest in a given subject and a desire to secure a traditional, liberal arts education. This is widely recognized as a good approach for the good student. Liberal arts graduates prove to be well-informed and well-educated members of their organizational teams.

Surveys have shown, though, that executives see value in combining specific business coursework with the liberal arts program, enabling the prospective employee to learn methodologies, processes, and ideas common to the world of organizational work.

To enhance the job opportunities in business for the nonbusiness major, the colleges of Business Administration and Arts and Sciences have devised a formal minor in business administration. This unusual program has been well-received by the business community, and has become a popular option for Arts and Sciences students. Successful

completion of the program is indicated on the student's permanent record.

The requirements for the business administration minor consist of 44 credit hours. Specific course requirements are:

### Required Courses:

ACCT 201 and 202  
BUSL 255  
ECON 103 and 104  
QBA 201 or PSY 121 or ECON 381 or INCO 301

### Three of the following five courses:

FIN 325  
MGT 300  
MIS 300  
MKT 301  
POM 310

Two additional courses taken from the five courses listed above or two advanced classes in ACCT, BA, BUSL, FIN, HRM, MGT, MIS, MKT, POM, or QBA.

The student should be aware that selecting certain options can result in an increase in hours because of prerequisites.

The student should note also that ECON 103, 104, and BUSL 255 will apply simultaneously to the Arts and Sciences social sciences requirement and the University General Education Tier II social sciences requirement. PSY 121 will apply to the University Tier I quantitative skills requirement, and ECON 381 to the Arts and Sciences social sciences requirement.

## Preparation in Cartography

(Geography - Cartography Major, major code #4236)

Cartography, the art and science of map making, is an integral part of geography. The spatial perceptions of geographers are translated into map form via various cartographic techniques. Cartography, in recent years, has become a major career objective within geography.

This program addresses both the academic and technical phases of cartography with the expressed purpose of leading to actual application and practical experience. The latter is accomplished through a practicum and employment in the Ohio University Cartographic Center (OUCC), an extension of the cartography program and the Department of Geography.

The Preparation in Cartography Program stresses a strong background in geography, emphasizes cartography related courses, and complements these courses with specific courses from related areas. Graduates from this program will have an added advantage in the job market.

### Geography major requirements with these specifications:

260 Maps .....	4
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#### Hours Over 300 Must Include:

360 Cartography .....	5
361 Statistical Cartography .....	5
365 Remote Sensing I .....	5
466 Remote Sensing II or 468 Automated Cartography .....	5
478 Geographic Information Systems .....	5

### University General Education:

Tier I, Tier II, and Tier III requirements  
English 151 should be selected for the freshman composition requirement.  
Courses to fulfill area requirements of the College of Arts and Sciences

Language Requirement: (24 hours)  
Arts & Sciences language requirement



**Humanities Requirement:** (18 hours)  
Arts & Sciences humanities requirement

**Social Science Requirement:** (18 hours)  
Arts & Sciences social science requirement

**Natural Science Requirement:** (29-30 hours)

**Mathematics:**  
MATH 118 Elementary Applied Math where  
necessary ..... 4  
MATH 163A, 163B Intro to Calculus ..... 7  
OR  
MATH 263A, 263B Analytic Geom. & Calc. .... 8

**Computer Science:**  
Two approval courses

**Geological Sciences:**  
GEOL 101 Intro to Geology ..... 5  
GEOL 330 Principles of Geomorphology ..... 5

### Additional Requirements:

CE 210 Plane Surveying ..... 4  
OR  
ART 151 Introduction to Graphic Design ..... 4

## Preparation for Cell Biology and Biotechnology

(Botany -Cell Biology and Biotechnology Major, major code #2118)

The Department of Botany offers a program in cell biology and biotechnology for those students interested in pursuing a profession in biotechnology or biology at the cellular or molecular level. This program can provide a sound basis for a technical career or for further study at the graduate level with a view to a career in research or teaching. As well as following closely the coursework outlined here and the requirements of the College of Arts and Sciences, students entering this program will be encouraged to elect additional coursework from the general field of biology appropriate to their chosen interest. Individual students should plan their programs in close consultation with an advisor in the Department of Botany.

### Freshman

BOT 110, 111 Intro to Bot. .... 12  
CHEM 151, 152, 153 Fundamentals of Chem. .... 15  
MATH 250A, 250B Finite Math ..... 8  
OR  
MATH 263A, 263B Analytic Geom. & Calc. .... 8  
ZOO 171, 173 Intro to Zool. .... 6  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Sophomore

BOT 309 Plant Systematics & Ohio Flora ..... 5  
CHEM 305, 306, 307, 308, 309 Organic ..... 15  
PHYS 201, 202, 203 Intro to Phys. .... 12  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Junior-Senior

BOT 312 Plant Anat ..... 5  
BOT 331 Plant Genetics ..... 5  
OR  
ZOO 325 General Genetics ..... 5  
BOT 404 Undergrad. Research ..... 4  
BOT 412 Plant Pathology ..... 5  
BOT 424 Plant Physiology ..... 6  
BOT 426 Physiological Plant Ecol. .... 5  
BOT 427 Molecular Genetics ..... 3  
BOT 431 Cell Biology ..... 5  
BOT 450 Biotechnol. & Genetic Engr ..... 4  
CHEM 351 Physical Chem. .... 4  
CHEM 490, 491, 492 Intro Biochem. .... 10  
MICR 411 Gen. Micro ..... 6

ZOO 460 Animal Physiology ..... 4  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

## Preparation in Creative Writing

(English Creative Writing Major, major code #5232)

By combining selected creative writing courses with the regular English major, the student may complete a special program in creative writing. For the specific requirements, see English Language and Literature in the Courses of instruction section of this catalog.

## Preparation for Criminology

(Sociology-Criminology Major, major code #4253)

The Criminology Special Curriculum is designed for those students who plan to pursue careers in some aspect of the criminal justice system (e.g., corrections, probation, parole, or law enforcement) yet wish to receive a liberal arts education. Students completing the program may wish to consider employment in criminal justice or further study in law, criminology, or criminal justice. Graduates of the program will receive a degree in sociology with the specialization in criminology noted.

Students are encouraged to enter the program as freshmen to facilitate completion in four years.

### Freshman

PSY 101 Gen. Psych. .... 5  
PSY 121 Elem. Statistics (or approved equivalent) ..... 4-5  
SOC 101 Intro to Soc. .... 5  
Criminology Elective Group\* (See below) ..... 4-8  
English composition ..... 5  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Sophomore

SOC 361 Deviant Behavior ..... 4  
SOC 362 Criminology ..... 4  
SOC 363 Juvenile Delinquency ..... 4  
Criminology Elective Group ..... 4-8  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Junior

SOC 351 Research Techniques ..... 4  
SOC 366 Penology ..... 4  
SOC 403 Devel. of Sociological Thought ..... 4  
OR  
SOC 404 Modern Soc. Theory ..... 4  
Criminology Elective Group ..... 4-8  
English composition ..... 4  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.

### Senior

Criminology Elective Group ..... 4-8  
Student must complete 8-14 hours from the following:  
PHIL 442 Phil. of Law ..... 5  
POLS 404 Civil Liberties ..... 4  
POLS 409 Law Enforcement ..... 5  
POLS 477 Legal Theo. & Social Probs ..... 4  
PSY 332 Abnormal Psych. .... 4  
PSY 337 Social Psych. of Justice ..... 4  
SOC 495 Internship in Criminology (Permission only) ..... 5-10  
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.  
Total hours required: Minimum 62; Maximum 85.

\*Student must complete four sociology courses from the Criminology Elective Group which consists of SOC 201, 211, 230, 329, 331, 365, 430, 464, and 467 for a total of 16 hours.

## Preparation for Dentistry

No specific area for the major is required by the dental colleges or by Ohio University. The student must present preparation in various basic sciences, and many students

do complete a major in one science or a dual major in two sciences. Many dental schools now require at least a year of behavioral and social sciences as well as a year of English. (Refer to courses recommended to fulfill these requirements following the Zoology Major Program, code #2501.)

Currently, most dental schools are selecting students with bachelor's degrees; a very limited number who have completed three years and have met the degree *in absentia* privilege requirements are admitted.

All dental school applicants are required to take the Dental Aptitude Test, offered during the academic year previous to the time the student plans to enroll in dentistry, preferably not later than the fall testing date.

### Chemistry-Pre dentistry Major

(major code #3312)

Students wishing to major in chemistry and prepare for admission to dental school have the option of completing either of two degree programs, one leading to the A.B. degree and the other to the B.S. degree. Variations on these programs are possible with consultation with an advisor.

#### A.B. Chemistry-Pre dentistry Major

##### Freshman

CHEM 151, 152, 153 Fundamentals of Chem	15
ZOOL 170, 171, 172, 173 Intro to Zoology	14
MATH 163 A.B Intro to Calculus	7
English composition	5
Arts and Sciences degree and general education requirements.	

##### Sophomore

CHEM 241, 242 Quantitative Analysis	5
CHEM 305, 306, 307 Organic Chemistry	9
CHEM 308, 309 Organic Lab	6
PHYS 201, 202, 203 Intro to Physics	12
Arts and Sciences degree and general education requirements.	

##### Junior

CHEM 325 Instrumental Analysis	4
CHEM 351 Physical Chemistry	4
ENG 305J Technical Writing	4
ZOOL 325 General Genetics	5
Arts and Sciences degree and general education requirements.	

##### Senior

CHEM 476 Modern Inorganic Chem	4
CHEM 490, 491, 492 Intro to Biochemistry	10
ZOOL 303 Compar. Vert. Anatomy	6
Arts and Sciences degree and general education requirements.	

#### B.S. Chemistry-Pre dentistry Major

##### Freshman

CHEM 151, 152, 153 Fundamentals of Chem	15
ZOOL 170, 171, 172, 173 Intro to Zoology	14
MATH 263A,B,C Analyt. Geom. & Calculus	12
English composition	5
Arts and Sciences degree and general education requirements.	

##### Sophomore

CHEM 241, 242 Quantitative Analysis	5
CHEM 305, 306, 307 Organic Chemistry	9
CHEM 308, 309 Organic Lab	6
MATH 263D Analyt. Geom. and Calculus	4
PHYS 251, 252, 253 General Physics	15
Arts and Sciences degree and general education requirements.	

##### Junior

CHEM 325 Instrumental Analysis	4
CHEM 453, 454 Physical Chemistry	6
CHEM 456 Physical Chemistry Lab	3
ENG 305J Technical Writing	4
ZOOL 325 General Genetics	5
Arts and Sciences degree and general education requirements.	

##### Senior

CHEM 476 Modern Inorganic Chem	4
CHEM 490, 491, 492 Intro to Biochemistry	10
ZOOL 303 Compar. Vert. Anatomy	6
Arts and Sciences degree and general education requirements.	

### Zoology-Pre dentistry Major

(Major code #2501)

The following sequence of courses is required for pre-dentistry students majoring in zoology. Additional selections from the recommended electives listed after the junior-senior program are encouraged. Students who elect the degree *in absentia* option must complete a minimum of 43 hours in zoological and biomedical sciences; those who elect the four-year program must complete a minimum of 50 hours in zoological and biomedical sciences. In addition, pre-dentistry students must meet the requirements of the general zoology major (see Courses of Instruction section for requirements).

##### Freshman

CHEM 151, 152, 153 Fundamentals of Chem.	15
English composition	5
MATH 163A, B Intro to Calc.	7
OR	
MATH 263A, B Analyt. Geom. & Calc.	8
ZOOL 170, 171, 172, 173 Intro to Zool.	14
Arts and Sciences degree requirements, University General Education Requirements, and/or electives. (English and comparative arts are recommended.)	

##### Sophomore

CHEM 301, 302 Organic (short)	6
OR	
CHEM 305, 306, 307 Organic (long)	9
CHEM 303, 304 Organic Lab (short)	5
OR	
CHEM 308, 309 Organic Lab (long)	6
PHYS 201, 202, 203 Intro	12
PSY 121 Elem Statistics	5
ZOOL 303 Compar. Vert. Anat.	6
ZOOL 325 Gen. Genetics	5
Language if needed	12

##### Junior

ZOOL 448* Cell Physiology (recommended, not required)	4
English composition	4
Language if needed	12
Arts and Sciences degree requirements, University General Education Requirements, as needed.	

##### Junior-Senior

CHEM 490, 491 Intro Biochem.	7
OR	
ZOOL 463 Cell Chemistry	4
MICR 411 General Microbiology	6
ZOOL 460* Animal Physiology	4
*Either ZOOL 448 or 460 is required.	

Other zoology courses strongly recommended: 326, 404, 406.  
Recommended behavioral and social sciences: ANTH 101 or 355;  
PSY 231, 273, 332, 336; sociology and computer science courses.  
Recommended humanities: CLNG 127, philosophy, literature, comparative arts.

### Preparation for the Study of the Environment

The study of the environment includes the physical nature of the planet as well as plant and animal interactions involving space, land, water, and other living organisms. Within the College of Arts and Sciences, the departments of Botany, Chemistry, Geography, Geological Sciences, and Zoological and Biomedical Sciences offer programs for preparation in the study of the environment. These programs allow students to develop a fundamental knowledge

of the nature of basic environmental parameters; a sense of the complex interactions of living organisms, including humans, on those parameters; and a basis for approaching solutions to problems resulting from this impact. A student choosing to major in the study of the environment at Ohio University should choose a discipline for intensive investigation (botany, chemistry, geography, geological sciences, microbiology, zoology) and, in consultation with the advisor in that department, develop a program of study to meet the particular goals of that student.

## Degree-Granting Programs in the Study of the Environment

The following programs are offered. The requirements for each are listed below.

1. Preparation for Environmental Biology (Botany Emphasis)
2. Preparation for Environmental Biology (Zoology Emphasis)
3. Preparation for Environmental Chemistry
4. Preparation for Environmental Geography
5. Preparation for Environmental Geology

### 1. Department of Botany

#### Preparation for Environmental Biology

(Botany-Environmental Biology Major, major code #2113)

The Department of Botany designed this preprofessional program to give students a broad base for developing careers in environmental sciences, conservation, natural resources, forestry, environmental quality control, and ecology. Since graduate degrees may be required for entry into some positions, training beyond the bachelor's degree is strongly recommended.

Students who would like to combine a minor in business administration with this program should see Preparation for Agri-Business listed earlier in this section.

1. Required BOT courses: 110; 111; 247; 248; 309; 331 (OR ZOOL 325); 404; 420; 424; 425 OR 426; 410 OR MICR 211, 212 OR MICR 411
2. Required nondepartmental courses
  - a. CHEM 151, 152, 153, 301, 302
  - b. ZOOL 171, 173
  - c. PHYS 201, 202, 203
  - d. MATH 163A
  - e. Either MATH 250B OR PSY 121
  - f. Either CS 220 OR CS 230 OR CS 322
  - g. GEOL 101 and three courses from the following: GEOG 101, GEOG 201, GEOG 260 OR GEOG 365, GEOG 302 OR GEOG 303, GEOG 447, GEOL 211, GEOL 310, GEOL 330
3. The following are strongly recommended as electives: BOT 308 OR 312, BOT 310, ECON 103, ECON 104, ECON 313, MATH 163B, ZOOL 435, ZOOL 477
4. University General Education and Arts and Sciences Bachelor of Science Degree Requirements.

### 2. Department of Zoological and Biomedical Sciences

#### Preparation for Environmental Biology

(Zoology-Environmental Biology Major, major code #2509)

This program offered through the Department of Zoological and Biomedical Sciences provides a background for students preparing for graduate school or careers in environmental biology. Selection of courses to fit individual curriculum needs and career goals can be made in the junior-senior program in consultation with the major advisor. It is recommended that the course schedule for the first two years be followed closely. Students must meet the requirements of the general zoology major (see Courses of Instruction section for requirements).

#### Freshman-Sophomore

ZOOL 170, 171, 172, 173 Intro to Zoology .....	14
CHEM 151, 152, 153 Fund. of Chemistry .....	15
CHEM 301, 302 Organic Chemistry .....	6
PHYS 201, 202 Intro to Physics .....	8
MATH 163A, 163B Intro to Calculus .....	7
BOT 111 Intro to Botany .....	6
MICR 211, 212 Environmental Microbiology; Lab. ....	6
GEOL 101 Intro to Geology .....	5
PSY 121 Elem. Statistics .....	5
INCO 103 Fund. of Public Speaking .....	4
PHIL 216 Philosophy of Science Survey .....	3
English composition .....	5
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

#### Junior-Senior

ZOOL 275 Animal Ecology AND 376 Field Ecology .....	7
ZOOL 325 Genetics .....	5
ZOOL 303 Comparative Vertebrate Anatomy .....	6
OR	
ZOOL 430 Invertebrate Zoology .....	6
OR	
ZOOL 435 Entomology .....	6
OR	
ZOOL 471 Ornithology .....	5
OR	
ZOOL 474 Mammology .....	6
ZOOL 369K Animal Conservation Biology .....	3
ZOOL 463 Cell Chemistry AND 460 Animal Physiology .....	8
BUSL 370 Environ. Law .....	4
OR	
GEOG 440 Environ. Impact Analysis .....	4
English Composition .....	4-5

Plus at least four courses from the following electives: Any of the alternatives not previously elected from the Junior-Senior courses.

BOT 247 Vegetation of North America  
 BOT 309 Plant Systematics and Ohio Flora  
 BOT 311 Biology of Human Affairs  
 BOT 425 Plant Ecology  
 CE 210 Plane Surveying  
 CE 415 Photogrammetry  
 CHEM 325 Instr. Methods of Analysis  
 CHEM 330 Intro to Toxicology  
 GEOG 302 Meteorology  
 GEOG 303 Climatology  
 GEOG 447 Resource Management  
 GEOL 231 Water and Pollution  
 GEOL 432 Origin and Class. of Soils  
 ZOOL 426 Population Genetics  
 ZOOL 429 Marine Biology  
 ZOOL 431 Limnology  
 ZOOL 472 Herpetology  
 ZOOL 477 Population Ecology  
 ZOOL 478 Community Ecology

NOTE: PHYS 203 may be required for admission to certain graduate and professional schools.

### 3. Department of Chemistry

#### Preparation for Environmental Chemistry

(Chemistry-Environmental Studies Major, major code #3315)

Students preparing for careers in environmental chemistry should pursue the regular B.S. or A.B. degree in chemistry and take some of the following environmentally related courses as electives. The Department of Chemistry has advisors in environmental chemistry to assist students in planning their studies in the field.

The major requirement for the B.S. degree includes the following: 151-152-153; 241-242; 305-306-307-308-309; 400A-B; 453-454-455; 456-457; 476; 431-432-433-434-435-436; 489 or 490-491-492. Extradepartmental requirements include MATH 263A-B-C-D, and PHYS 251-252-253, which should be completed by the end of the second year. The B.S. degree program is chosen by students seeking entrance into graduate programs in chemistry.

The major requirement for the A.B. degree includes the following: 151-152-153; 241-242; 301-302 or 305-306-307; 303-304 or 308-309; 325 or any two of the following pairs of courses: 431-434 or 432-435 or 433-436; 351 or 453-454-455; 476; and a course in biochemistry. A full year's work is required in at least one of the following fields: analytical (241-242, and any two of the following pairs of courses: 431-434 or 432-435 or 433-436), organic (305-306-307), physical (453-454-455), or biochemistry (490-491-492).

The following environmentally related electives are suggested courses to choose from: BOT 111, 425, 426; BUSL 255, 370, 475; CHEM 330, 479, 483; ECON 313; GEOG 201, 321, 427; GEOL 201, 291A, 291E, 291I, 407, 432, 480, 481; ISE 304; MICR 211, 212, 411, 412; PSY 335; SOC 340; ZOOL 170, 171, 172, 173, 475, 477, 479.

#### 4. Department of Geography

##### Preparation for Environmental Geography

(Geography-Environmental Studies Major, major code #4232)

Students preparing for a career in environmental geography should pursue a B.S. degree with a major in geography. Students planning to follow this curriculum should consult the chair of the Department of Geography as soon as they elect this program so that they can be assigned to advisors.

Students in this program are required to complete a minimum of 192 hours, including geography major requirements, the Arts and Sciences degree requirements in foreign languages and humanities; the University General Education Requirements; and the courses listed below:

##### Core Curriculum:

Geography major requirements with these specifications:

201 Environmental Geography	4
241 Global Issues	4

Choice from this list fulfills techniques requirement:

360 Cartography	5
260 Maps and 365 Remote Sensing I	9
266 Maps and 478 Geographic Information Systems	9

Hours over 300 must include five from this list:

302 Meteorology	5
303 Climatology	5
321 Population Geography	4
344 Agroecosystems	4
350 Land Use Planning	4
353 Environmental Planning	4
380 Remote Sensing II	5
411 Advanced Physical	4
440 Environmental Impact Analysis	4
475 Analysis of Geographic Systems	4
478 Geographic Information Systems	5
479 Adv Geographic Information Systems	5

Choose at least 18 hours from either the biological sciences or earth sciences group below. The student should take at least eight hours in one subject area and at least two different subject areas. This concurrently will satisfy the Arts and Sciences natural sciences degree requirement.

##### Biological Sciences:

BOT 101* Prin. of Biol.	5
BOT 102 Plant Biol.	5
BOT 103 Biol., Plants, & Man	4
BOT 110* Intro to Bot.	6
BOT 111 Intro to Bot.	6
BOT 160 Applied Plant Sci. & Tech.	4
BOT 220 Woody Plants	4
BOT 247 Veg. N. Amer.	4
BOT 248 Trees and Shrubs	4
BOT 303 Medicinal Plants of Ohio	3
BOT 410 Plants & Soil	4
BOT 425 Ecol.	5
BOT 426 Phys. Plant Ecol.	5
MICR 211 Environ. Micro.	3
MICR 212 Environ. Micro. Lab.	2

ZOOL 101* Prin. of Biol.	5
ZOOL 103 Human Biol.	5
ZOOL 170, 171, 172, 173 Intro to Zool.	14
ZOOL 376 Ecol. Lab.	3
ZOOL 477 Population Ecol.	4
ZOOL 478 Community Ecology	4

\*NOTE that credit is awarded only for one of the following courses: BOT 101, BOT 110, ZOOL 101, ZOOL 170. Note also that credit is not awarded for both BOT 102 and BOT 111.

##### Earth Sciences:

GEOL 101 Intro to Geology	5
GEOL 201 Man & Phys. Environ.	4
GEOL 211 Intro Oceanography	4
GEOL 231 Water and Pollution	4
GEOL 270 World Mineral Resources	3
GEOL 291 Selected Topics in Geol.	2
GEOL 330 Prin. of Geomorphology	5
GEOL 432 Origin & Classification of Soils	4
GEOL 470 Economic Geology	4
GEOL 480 Hydrology I	4
GEOL 481 Hydrology II	4

To complete the natural sciences requirement, add at least one nongeology natural sciences course.

Choose at least 18 hours from the list below. This includes at least eight hours in one subject area and at least two different subject areas. This concurrently will satisfy the Arts and Sciences social sciences requirement.

BUSL 255 Law & Society	4
BUSL 370 Envir. Law	4
ECON 103 Prin.	4
ECON 104 Prin.	4
ECON 303 Microeconomics	4
ECON 304 Macroeconomics	4
ECON 313 Econ. of the Envir.	4
ECON 335 Economics of Energy	4
HIST 333 Oil, Energy, Interna. Diplomacy	4
POLS 425 Envtl. & Nat. Resource Politics and Policy	4
PSY 335 Envir. Psych.	5
SOC 340 Population Anlys.	4

Complete the University General Education Requirements.

#### 5. Department of Geological Sciences

##### Preparation for Environmental Geology

(Geological Sciences-Environmental Studies Major, major code #3323)

The preprofessional program in environmental geology, offered by the Department of Geological Sciences, is designed to provide the student with broad training in preparation for a career in conservation, natural resource management, land-use planning, and environmental quality control. In most instances, students electing this degree option should anticipate further training at the graduate level. It is important that students enrolling in this program consult with the undergraduate advisor in the Department of Geological Sciences before planning their schedule of coursework.

The specific courses listed below constitute the departmental requirements for this degree program. Students should schedule additional courses to fulfill the General Education Requirement and the College of Arts and Sciences distribution requirements.

##### Freshman

GEOL 101 Intro to Geology	5
GEOL 256 Historical Geology	4
GEOL 330 Geomorphology	5
CHEM 121, 122, 123, or 151, 152, 153* Intro to Chem.	12 or 15
BOT 101 Biology	5
OR	
ZOOL 101 Biology	5

##### Sophomore

GEOL 310 Rocks & Minerals	6
GEOL 350 Stratigraphy-Sedimentology	5

CHEM 301, 302 Organic Chemistry .....	6
MATH 163A, 163B or 263A, 263B* Calculus .....	7 or 8
MATH 250B Finite Math .....	4

## Junior-Senior

GEOL 360 Structural Geology .....	5
GEOL 480 Hydrogeology I .....	4
GEOL 481 Hydrogeology II .....	4
GEOL 483 Summer Field Hydrology .....	6
PHYS 201, 202 or 251, 252, 253* Intro to Physics .....	8 or 15
BUSL 370 Environmental Law .....	4
ZOOL 275 Animal Ecology .....	4
OR	
BOT 425 Plant Ecology .....	5

Plus three courses selected from the following list:

BOT 310, 410, 424, 426, or 475
CHEM 483, 484, or 485
GEOG 241, 350, 440, 447, or 478
GEOL 407, 476, or 482
MICR 211
POLS 410 or 425
ZOOL 376, 426, 431, 473, 477, 478

\*Students should discuss the appropriate chemistry, calculus, and physics sequence with their departmental advisor.

## Preparation for Exercise Physiology

(Zoology - Pre-Exercise Physiology Major, major code #2516)

The following curriculum is designed to provide the student interested in pursuing a graduate degree in exercise or work physiology with the necessary coursework to prepare for advanced study in a research-oriented graduate degree program.

Completion of the coursework including electives and Arts and Sciences and General Education Requirements will culminate in the award of the Bachelor of Science degree in zoology - pre-exercise physiology. Those students who finish the four-year B.S. program must complete a total of at least 192 quarter hours with at least 90 hours in Arts and Sciences coursework above the freshman level (numbered 200 or above). Also, a minimum of 50 quarter hours in the Department of Zoological and Biomedical Sciences is required, including departmental requirements and at least nine quarter hours taken at the junior-senior level.

Although an undergraduate degree in the area of exercise physiology may provide the recipient the opportunity to compete in the job market, most current employment opportunities require a master's and/or doctoral degree.

## Freshman

CHEM 151, 152, 153 Fundamentals of Chem. ....	15
ENG 151 Fr. Comp.: Wrting. and Rhet. ....	5
MATH 163A, 163B Intro to Calc. ....	7
OR	
MATH 263A, 263B Analytic Geom. and Calc. ....	8
PSY 101 Gen. Psych. ....	5
PSY 121 Elem. Stat. for the Behav. Sci. ....	5
ZOOL 170, 171, 172, 173 Intro to Zool. ....	14
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

## Sophomore

CS 120 Comp. Sci. Survey (or equivalent) ....	5
PHYS 201, 202 Intro to Physics* ....	8
ZOOL 301 Human Anatomy ....	6
ZOOL 345 Human Physiol. ....	4
ZOOL 346 Human Physiol. Lab. ....	3
ZOOL 352 Kinesiology ....	4
OR	
ZOOL 420 Animal Locomotion ....	4
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

## Junior-Senior

CHEM 301, 302 Organic (Short) .....	6
ZOOL 463 Cell Chemistry .....	4

## OR

CHEM 490, 491 Intro to Biochem. ....	7
MICR 411 Gen Microbiol. ....	6
ZOOL 325 Gen. Genetics ....	5
ZOOL 445 Physiology of Exercise ....	4
ZOOL 446 Physiology of Exercise Lab. ....	3
ZOOL 448 Cell Physiology ....	4

## OR

ZOOL 460 Animal Physiology ....	4
ZOOL 485 or 485H Undergrad. Research ....	6-12
ZOOL 479 Evolution ....	4
English composition ....	4
Language, if needed ....	12
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

The following courses are suggested to be used to supplement the major or serve as electives:

ANTH 101 Intro to Cult. Anthropology ....	5
ANTH 355 Med. Anthropology ....	4
HEFN 128 Intro to Nutrition ....	4
HEFN 428 Advanced Nutrition ....	4
PHIL 231 Phil. of Sport ....	4
PHIL 331 Moral Prob. in Med. ....	5
PSY 231 Psych. of Adjust. ....	4
PSY 273 Child and Adoles. Psych. ....	4
PSY 275 Educ. Psych. ....	4
PSY 332 Abnormal Psych. ....	4
SOC 101 Intro to Soc. ....	5
ZOOL 303 Comp. Anat. ....	6
ZOOL 409 Neurobiol. I ....	4
ZOOL 410 Neurobiol. II ....	4
ZOOL 450 Prin. Endocrinol. ....	4
ZOOL 453 Gen. Pharm. ....	3

\*PHYS 203 may be required for admission to certain graduate and professional schools.

## Preparation for Field Biology

(Botany-Field Biology Major, major code #2115)

The program in field biology offered through the Department of Botany is designed to prepare students for employment as park naturalists and in outdoor education, outdoor education programs, and conservation. It should be emphasized that students who enter this program, if they later decide to pursue advanced training in biology, will have to acquire additional background in physics, math, and chemistry. Students wishing to include a minor in business administration with this program should consult with an advisor in the Department of Botany for details.

- Required BOT courses: 110, 111, 247, 248, 309, 310, 404, 420, and 425
- Additional courses in BOT are to be selected from the following list to make a minimum of 50 total hours in BOT: 307, 308, 312, 331 (OR ZOOL 325), 410, 426, 427, 431, 460, and 475
- Required nondepartmental courses
  - ZOOL 171, 173 plus a minimum of 20 hours from the following — 275, 325 (if BOT 331 not completed under 2 above), 376, 429, 430, 434, 435, 457, 468, 471, 472, 474, 477, 478, MICR 211 and 212 OR MICR 411
  - CHEM 121, 122, 123 OR CHEM 151, 152, 153
  - GEOL 101 plus a minimum of 4 additional hours from GEOL
  - GEOG 101 plus a minimum of 8 additional hours from GEOG
  - It is recommended that PSY 121 be used to fulfill the Tier 1 quantitative skills requirement
  - University General Education and Arts and Sciences Bachelor of Science Degree Requirements.

## Preparation for Forestry

(Botany-Preforestry Major, major code #2112)

Although no formal professional forestry program is offered at Ohio University, the Department of Botany does offer an abbreviated program whereby interested students



can obtain some preprofessional training in botany and related disciplines at the freshman and/or sophomore level at Ohio University and then transfer to a School of Forestry or School of Natural Resources at a different university to complete upper level courses in a formal professional forestry program. This option does offer advantages to the beginning student in that enrollments in professional schools of forestry are often limited, and competition for available spaces in the first year or two of such programs may preclude a student from initial admission to a formal program of training. Other than the general requirements for admission to Ohio University, no further requirements are necessary for admission to a preforestry program in the Department of Botany.

Students who wish to enroll at Ohio University for preprofessional training in plant science before applying for transfer to professional schools of forestry should contact the Undergraduate Advising Director in the Department of Botany for a suggested preforestry curriculum and assignment to an advisor. The following sequence of courses is suggested for the freshman year of a preforestry program that would satisfy the requirements of many schools of forestry. Suggested course sequences for the sophomore year and above may be obtained through consultation with the Undergraduate Advising Director and the student's individual advisor.

#### Freshman

BOT 110, 111 Intro to Bot. ....	12
ZOOL 171, 173 Intro to Zool. ....	6
CHEM and/or MATH (see advisor before selecting) ....	12-15
Language and/or Tier I/II requirements ....	12-15

## Preparation for Geographic Information Systems Analyst

(Geography-Geographic Information Systems Analyst major, major code #4235)

The goal of the geographic information systems analyst program is to provide a technical background for geographers interested in working with business, government, or planning agencies. The emphasis of the program is twofold: first, to develop a strong background in the field of geographic information systems as practiced in the fields of cartography, remote sensing, and quantitative methods; second, to develop cognate skills in the fields of computer science, economics, mathematics, and public administration.

### Core Curriculum in Geography:

Geography major requirements with these specifications:  
Hours over 300 must include:

GEOG 324 Industrial Geog. ....	4
OR	
GEOG 474 Anal. of Geographic Systems ....	4
GEOG 350 Land Use Planning ....	4
GEOG 353 Environmental Planning ....	4
GEOG 365 Remote Sensing I ....	5
GEOG 411 Advanced Physical ....	4
OR	
GEOG 440 Environ. Impact Assessment ....	4
GEOG 447 Resource Management ....	5
OR	
GEOG 466 Remote Sensing II ....	5
GEOG 478 Geographic Info. Systems ....	5
GEOG 479 Adv. Geographic Info. Systems ....	5

## Courses to Fulfill Area Requirements of the College of Arts and Sciences

### English:

Must meet part of Arts and Sciences English requirement and fulfill University Tier I and Junior English requirement by taking the following:

ENG 151 Fr. Comp.: Wrting. & Rhet. ....	5
ENG 305J Tech. Wrting. ....	4

### Language:

Fulfill Arts and Sciences language requirements.

### Humanities:

Fulfill Arts and Sciences humanities requirements.

### Social Science:

Must meet Arts and Sciences social sciences requirements by selecting from the following:

BUSL 255 Law & Society ....	4
BUSL 370 Envir. Law ....	4
BUSL 442 Law of Property & Real Estate ....	4
BUSL 475 Govt. & Business ....	4
ECON 103 Prin. ....	4
ECON 104 Prin. ....	4
ECON 213 Current Econ. Prob. ....	4
ECON 303 Microecon. ....	4
ECON 304 Macroecon. ....	4
ECON 313 Econ. of Envir. ....	4
ECON 381 Sta. of Econ. ....	4

### Natural Science:

Must meet part of Arts and Sciences natural science requirement by taking the following:

MATH 163A, B Intro to Calculus ....	7
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NOTE: Students are encouraged to complete a minor in computer science.

## General Education (Tier II)

Complete University General Education Requirements.

## Gerontology Certificate Program

The colleges of Arts and Sciences and Health and Human Services jointly sponsor the undergraduate Gerontology Certificate Program for students in any major program within the University who want to gain knowledge and skills for a career in working with the elderly. Completion of this program is officially recognized on the student's transcript upon graduation.

See the Courses of Instruction section of this catalog for the Gerontology Certificate Program requirements.

## Preparation for Government Foreign Service

(Economics-Pre-Foreign Service Major, major code #4223)

(History-Pre-Foreign Service Major, major code #4212)

(Political Science-Pre-Foreign Service Major, major code #4202)

Students desiring to prepare for the foreign service officer examinations, which are given yearly, are advised to acquire as broad an education as possible. Facility in written and spoken English; competency in a foreign language; and a good background in economics, history, political science, business, or public administration are essential. Detailed information about foreign service officer examinations, including sample questions from previous examinations, may be obtained from the major departments.

## Preparation for Law

(Economics-Prelaw Major, major code #4222)

(English-Prelaw Major, major code #5234)

(History-Prelaw Major, major code #4214)

(Philosophy-Prelaw Major, major code #5244)

(Political Science-Prelaw Major, major code #4203)

(Sociology-Prelaw Major, major code #4254)

A student in the College of Arts and Sciences who plans to enter law school normally completes the specific requirements for the Bachelor of Arts degree. No special curriculum is prescribed. The prelaw student may complete a major in the area of his or her principal interest. The student is advised to select courses from as many of the following as possible: English composition and literature and American literature; history, with a preference for English

and American; political science; economics; sociology; a laboratory science; mathematics; philosophy; ethics; logic; accounting; psychology; and a foreign language. Courses in speech and training in expression, as well as activities that develop the capacity for independent thought and action, are recommended. The departments of Economics, English, History, Philosophy, Political Science, and Sociology and Anthropology designate faculty advisors to help students interested in law careers. These advisors have information about the Law School Admission Test and can supply application blanks for this test.

The Ohio Supreme Court has ruled that a student entering law school must be able to show possession of an undergraduate degree from an approved college if he or she wishes to take the Ohio Bar Examination. Law schools in the state of Ohio require the degree of all entering students regardless of the state in which they plan to take the bar examination.

The degree *in absentia* privilege is available to students who do not plan to seek admission to an Ohio law school. A student who has completed 144 quarter hours at Ohio University with a point-hour ratio of 2.0 or above on all hours attempted and who has satisfied the requirements for the A.B. or B.S. degree may obtain the degree after completing, at an accredited school of law, a full year's work of the quality prescribed for a bachelor's degree at Ohio University, provided he or she is eligible for advancement without condition to the second year of law school. Prior to entering the school of law, the student must secure a statement in writing from the dean giving the *in absentia* privilege.

## Preparation for Marine or Freshwater Biology

(Zoology/Marine or Freshwater Biology Major, major code #2514)

The program in Ecology, Behavior, and Evolution, in the Department of Zoological and Biomedical Sciences, provides a program for undergraduate majors in zoology who are interested in marine and/or freshwater biology. Graduates from this program will meet state and federal civil service course qualifications for registers for fishery biologist, ecologist, and general biologist. This program will also provide undergraduate training for students planning to go to graduate school in either marine or freshwater biology. Students must meet the requirements of the general zoology major (see Courses of Instruction section for requirements).

### Freshman-Sophomore

ZOOL 170, 171, 172, 173 Intro to Zoology .....	14
ZOOL 275, 376 Animal Ecology, Field Ecology .....	7
ZOOL 325 Genetics .....	5
CHEM 151, 152, 153 Fund. of Chemistry .....	15
CHEM 301, 302 Organic Chemistry .....	6
PHYS 201, 202, 203 Intro to Physics .....	12
MATH 163A, 163B Intro to Calculus .....	7
MICR 411 Gen. Microbiology .....	6
PSY 121 Elem. Statistics .....	5
English composition .....	5
HSC 115, 156 Life Saving, SCUBA .....	1, 1
HLTH 227, 228 First Aid, CPR .....	3, 1

Arts and Sciences degree requirements, University General Education Requirements, and/or electives.

### Junior-Senior

ZOOL 429 Marine Biology .....	5
OR	
ZOOL 431 Limnology .....	5
ZOOL 430 Invertebrate Zoology .....	6
ZOOL 468 Ichthyology .....	4
ZOOL 477 Population Ecology .....	4
OR	
ZOOL 478 Community Ecology .....	4
ZOOL 426 Population Genetics .....	4

OR	
ZOOL 479 Evolution .....	4
OR	
ZOOL 481 Molecular Evolution .....	3
ZOOL 460 Animal Physiology .....	4
ZOOL 463 Cell Chemistry .....	4
English composition .....	4

Plus at least three courses from the following biology electives:

Courses with an aquatic orientation from a summer field station or any of the alternatives not previously elected from the Junior-Senior core.

BOT 307 Morph. Algae and Bryo.
BOT 310 Biology of Fungi
ZOOL 435 Entomology
ZOOL 457 Animal Systematics
ZOOL 461 Animal Phys. Lab
ZOOL 471 Ornithology
ZOOL 472 Herpetology
ZOOL 473 Animal Behavior
ZOOL 474 Mammalogy

Plus at least two courses from the following electives:

BUSL 370 Environmental Law
CE 452 Water & Wastewater Analysis
CE 458 Water Quality Engineering
CHEM 325 Instrumental Methods of Analysis
CHEM 330 Intro to Toxicology
GEOG 302 Meteorology
GEOG 440 Environ. Impact Analysis
GEOL 454 Marine Geology
GEOL 480 Hydrogeology

## Preparation for Medical Technology

(Zoology-Medical Technology Major, major code #2123)

This program in medical technology prepares students for work in hospital laboratories, public health bureaus, and other laboratories concerned with medical diagnosis and investigation. It leads to a Bachelor of Science degree in zoology and certification by the American Society of Clinical Pathologists or other certifying body.

The Ohio University-hospital school of medical technology affiliation for training of medical technologists fulfills the requirements established by the A.M.A. and A.S.C.P. and affords the student an opportunity to earn the bachelor's degree.

After completing (1) a minimum of 144 quarter hours with at least a 2.0 point-hour ratio in the major and in all hours attempted and (2) all area requirements for the baccalaureate degree, the student is eligible to apply for admission to one of several affiliated hospital schools for the clinical program. Upon satisfactory completion of the 12-month clinical program, the student will receive the Bachelor of Science degree from Ohio University.

Approval occasionally may be granted for completion of the clinical program at hospitals other than those affiliated with Ohio University if such hospitals have C.A.H.E.A.-approved programs in medical technology and if, for reasons of location or other factors, this would better meet the needs of the student. A student seeking such approval is required to present a copy of the hospital's program of study to the Department of Zoological and Biomedical Sciences for evaluation. The student may enroll in this substitute program if it is approved.

The student is urged to consult his or her advisor frequently during the preclinical period. Early in the fall quarter preceding the clinical program, specific information about applying to an affiliated school of medical technology should be obtained from the medical technology advisor.

During the 12-month clinical program the student registers with and pays fees to Ohio University. A special fee schedule applies to these four quarters and both fourth- and fifth-year students are required to register. Ohio Uni-

versity then pays the total tuition for each student to the hospital-based school of medical technology.

A student who transfers from another program or institution (including branch campuses of Ohio University) cannot normally expect to complete the preclinical requirements in three years unless the need to make up courses is minimal.

A student requiring financial assistance may apply for a Kellogg Foundation or other loan through the Office of Student Financial Aid and Scholarships.

#### Freshman

CHEM 151, 152, 153 Fundamentals of Chem. ....	15
English composition .....	5
MATH 113 Algebra .....	5
OR	
MATH 163A Intro to Calc.** .....	4
ZOOL 170, 171, 172, 173 Intro to Zool. ....	14
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

\*\*Of the choices, this is recommended.

#### Sophomore

CHEM 241, 242 Quant. Anal. ....	5
CHEM 301, 302 Organic (short) .....	6
CHEM 325 Instr. Methods of Analys. ....	4
ZOOL 300 Elements of Anat. & Histology .....	6
ZOOL 325 Gen. Genetics .....	5
ZOOL 345 Human Physiology .....	4
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

#### Junior

MICR 411 Gen. Micro. ....	6
MICR 415 Immunology .....	6
ZOOL 463 Cell Chem. ....	4
ZOOL 464 Physiol. Chem. Lab. ....	3
English composition .....	4-5
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

Four quarters of coursework constituting the clinical portion of the program are taken at a hospital-based school of medical technology. The student registers each quarter for these courses which are entitled Medical Technology Clinical Internship 470A, B, C, and D. A typical program includes:

Bacteriology and Serology .....	18 hours
Clinical Chemistry .....	23 hours
Hematology .....	10 hours
Immunohematology .....	5 hours
Parasitology .....	3 hours
Radioisotopes .....	1 hour
Urinalysis .....	4 hours

## Preparation for Medicine

Most medical colleges require completion of the bachelor's degree for admission; all others require a minimum of three academic years.

No specific area for the major is required by medical colleges or by Ohio University in undergraduate preparation for medicine. The student must present preparation in various basic sciences, and many students do complete a major in one science or a dual major in two sciences.

For most medical schools, the requirements for admission include general chemistry; quantitative analysis; organic chemistry, including laboratory; mathematics; physics; general zoology; comparative vertebrate anatomy; and embryology. Many medical schools now require or strongly recommend at least a year of behavioral and social sciences, a year of English, including literature, and additional courses in humanities. (Refer to courses recommended to fulfill these requirements following the Zoology Major Program, code #2502.) If the student has a particular

medical school in which he or she wishes to enroll, the program should be planned to meet the specific requirements of that school.

All medical college applicants are required to take the Medical College Admission Test (MCAT) in spring (preferred) or fall of the calendar year previous to the year they expect to enroll in medical college.

A student who plans to complete only three years at Ohio University before entering medical college is urged to meet requirements of the College of Arts and Sciences so as to be eligible for the degree *in absentia* privilege.

Students are encouraged to note particularly the opportunities provided by the Ohio University College of Osteopathic Medicine.

## Chemistry-Premedicine Major

(Major code #3314)

Students wishing to major in chemistry and prepare for admission to medical school have the option of completing either of two degree programs, one leading to the A.B. degree and the other to the B.S. degree. Variations on these programs are possible with consultation with an advisor.

### A.B. Chemistry-Premedicine Major

#### Freshman

CHEM 151, 152, 153 Fundamentals of Chem .....	15
MATH 163A,B Intro to Calculus .....	7
ZOOL 170, 171, 172, 173 Intro to Zoology .....	14
English composition .....	5
Arts and Sciences degree and general education requirements.	

#### Sophomore

CHEM 241, 242 Quantitative Analysis .....	5
CHEM 305, 306, 307 Organic Chemistry .....	9
CHEM 308, 309 Organic Lab .....	6
PHYS 201, 202, 203 Intro Physics .....	12
Arts and Sciences degree and general education requirements.	

#### Junior

CHEM 325 Instrumental Analysis .....	4
CHEM 351 Physical Chemistry .....	4
ENG 305J Technical Writing .....	4
ZOOL 325 General Genetics .....	5
Arts and Sciences degree and general education requirements.	

#### Senior

CHEM 476 Modern Inorganic Chem .....	4
CHEM 490, 491, 492 Intro to Biochemistry .....	10
ZOOL 303 Compar. Vert. Anatomy .....	6
Arts and Sciences degree and general education requirements.	

## B.S. Chemistry-Premedicine Major

#### Freshman

CHEM 151, 152, 153 Fundamentals of Chem .....	15
MATH 263A,B,C Analyt. Geom & Calculus .....	12
ZOOL 170, 171, 172, 173 Intro to Zoology .....	14
English composition .....	5
Arts and Sciences degree and general education requirements.	

#### Sophomore

CHEM 241, 242 Quantitative Analysis .....	5
CHEM 305, 306, 307 Organic Chemistry .....	9
CHEM 308, 309 Organic Lab .....	6
MATH 263D Analyt. Geom. and Calculus .....	4
PHYS 251, 252, 253 General Physics .....	15
Arts and Sciences degree and general education requirements.	

#### Junior

CHEM 325 Instrumental Analysis .....	4
CHEM 453, 454 Physical Chemistry .....	6
CHEM 456 Physical Chemistry Lab .....	3
ENG 305J Technical Writing .....	4
ZOOL 325 General Genetics .....	5
Arts and Sciences degree and general education requirements.	

## Senior

CHEM 476 Modern Inorganic Chem .....	4
CHEM 490, 491, 492 Intro to Biochemistry .....	10
ZOOL 303 Compar. Vert. Anatomy .....	6
Arts and Sciences degree and general education requirements.	

**Zoology-Premedicine Major**

(Major code #2502)

Premedical students majoring in zoology will be required to complete the following program. Students who elect the degree in *absentia* option must complete a minimum of 43 hours in zoology/microbiology; those who elect the four-year program must complete a minimum of 50 hours in zoology/microbiology. In addition, premedicine students must meet the requirements of the general zoology major (see Courses of Instruction section for requirements).

## Freshman

CHEM 151, 152, 153 Fundamentals of Chem. ....	15
MATH 163A, 163B Intro to Calc. ....	7
OR	
MATH 263A, 263B Analytic Geom. & Calc. ....	8
ZOOL 170, 171, 172, 173 Intro to Zool. ....	14
English composition .....	5
Arts and Sciences degree requirements, University General Education Requirements, and/or electives. (English and comparative arts are recommended.)	

## Sophomore

CHEM 301, 302 Organic (short) .....	6
OR	
CHEM 305, 306, 307 Organic (long) .....	9
CHEM 303, 304 Organic Lab (short) .....	5
OR	
CHEM 308, 309 Organic Lab (long) .....	6
PHYS 201, 202, 203 Intro .....	12
ZOOL 303 Compar. Vert. Anat. ....	6
ZOOL 325 Gen. Genetics .....	5
PSY 121 Elem Statistics .....	5
Language if needed .....	12
Arts and Sciences degree requirements, University General Education Requirements, and/or electives in humanities and social sciences.	

## Junior

ZOOL 448 Cell Physiology (recommended) .....	4
OR	
ZOOL 460 Animal Physiology .....	4
English composition .....	4
Language if needed .....	12
Other humanities and social sciences	

## Junior-Senior

MICR 411 General Microbiol .....	6
ZOOL 406 Embryology .....	6
ZOOL 463 Cell Chem. ....	4
OR	
CHEM 489 Basic Biochem .....	4
OR	
CHEM 490, 491 Intro Biochem. ....	7
Choose one:	
ZOOL 275, 479 .....	4

Recommended electives: MICR 415, ZOOL 326, 408, 461, CHEM 243.

Recommended behavioral and social sciences: ANTH 101 or 355; sociology and computer science courses; PSY 231, 273, 332, 336. Recommended humanities: CLNG 127, philosophy, literature, comparative arts.

**Preparation for Meteorology**

(Geography-Premeteorology Major, major code #4233)

(Mathematics-Premeteorology Major, major code #3104)

(Physics-Premeteorology Major, major code #3336)

The following program is intended to provide an interdisciplinary program in the departments of Geography,

Mathematics, and Physics for students who wish to prepare themselves for training at the graduate level in the fields of meteorology, climatology, and atmospheric physics. The choice of a geography, mathematics, or physics emphasis is open to the student.

## Freshman

CHEM 151 Fundamentals of Chem. ....	5
CHEM 152 Fundamentals of Chem. ....	5
GEOG 101 Elements of Physical Geog. ....	5
GEOL 101 Intro to Geol. ....	5
MATH 263A (or advanced placement), 263B, 263C Analyt. Geom. & Calc. ....	12
English composition .....	5

## Sophomore

GEOG 201 Environmental Geography .....	4
GEOL 211 Oceanography .....	4
MATH 263D .....	4
MATH 340 Diff. Equations .....	4
MATH 440 Vector Analysis .....	4
MATH 441 Fourier Series & Partial Diff. Equations .....	4
PHYS 251, 252, 253 Gen. Phys. ....	15
OR	
PHYS 201, 202, 203, Intro to Phys. ....	12
AND	
PHYS 315 Intermed. Phys. for Scientists & Engineers .....	4

## Junior

GEOG 302 Meteorology .....	5
GEOG 303 Climatology .....	5
GEOG 304 Observations in Meteorology .....	2
PHYS 311, 312 Mechanics .....	8
English composition .....	4

## Senior

Two courses in computer programming or quantitative methods (see advisor for approved list) .....	10
GEOG 405 Practl. in Meteorological Forecasting .....	2-10
PHYS 411 Thermodynamics .....	4

In addition, the student should select one of the three departments for specialization, contact that department for advising, and select the appropriate additional set of courses given below:

**Plan A (Emphasis in Geography)**

GEOG 121 Human Geography .....	4
GEOG 411 Adv. Physical Geography .....	4
GEOG 447 Resources Management .....	4
GEOG 260 or 360 or 365 .....	4 or 5

**Plan B (Emphasis in Mathematics)**

MATH 410 Matrix Theory .....	4
MATH 444 Intro to Numerical Analysis .....	4
MATH 445 Adv. Numerical Methods .....	4
MATH 446 Numerical Linear Alg. ....	4

**Plan C (Emphasis in Physics)**

CE 340 Fluid Mechanics .....	5
PHYS 272, 273 Electronic Lab. ....	4
PHYS 316 Contemporary Phys. ....	3
PHYS 412 Kinetic Theory & Statistical Mechanics .....	4
OR	
PHYS 423 Optics .....	4

The student must also take courses necessary to satisfy the requirements of the College of Arts and Sciences, and electives as necessary to fulfill the University hours and General Education Requirements.

**Preparation for Optometry**

(Zoology-Preoptometry Major, major code #2505)

The requirements for admission to schools of optometry are not uniform. A minimum of 90 hours exclusive of military science and physical education is required. The following curriculum will meet the admission requirements for a collegiate program and consequently of most independent schools of optometry. The student planning to

earn the degree *in absentia* must complete at least 144 hours including all Arts and Sciences and University General Education requirements and the program outlined below. This must include the departmental area requirements for the general zoology major (see Courses of Instruction section for requirements). If a student wants to graduate from Ohio University without realizing the *absentia* option, the zoology major requirements for his or her catalog year of entry must be fulfilled.

#### Freshman

CHEM 151, 152, 153 Fundamentals of Chem. ....	15
MATH 263A Analytic Geom. & Calc. ....	4
MATH 263B Analytic Geom. & Calc.* ....	4
ZOOL 170, 171, 172, 173 Intro to Zoology ....	14
English composition ....	5
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

\*Suggested, not required.

#### Sophomore

CHEM 305, 306, 307 Organic ....	9
PSY 101 Gen. Psych. ....	5
ZOOL 303 Compar. Vertebrate Anat. ....	6
ZOOL 325 Gen. Genetics ....	5
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

#### Junior

MICR 411 General Microbiol. ....	6
PHYS 201, 202, 203 Intro ....	12
ZOOL 345 Human Physiology ....	4
OR	
ZOOL 460 Animal Physiology ....	4
ZOOL 463 Cell Chem ....	4
OR	
CHEM 490, 491 Intro Biochem ....	7
English composition ....	4
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

Because most students complete a baccalaureate degree at O.U. before they are accepted to their professional school, the preoptometry student should consult the department advisor early in the *freshman* year for recommendations on degree requirements and electives.

Further information relative to requirements and the profession of optometry may be obtained by writing to the American Optometric Association, 243 N. Lindbergh Blvd., St. Louis, Missouri 63141.

## Preparation for Pharmacy

(Zoology-Prepharmacy Major, major code #2506)

(Chemistry-Prepharmacy Major, major code #3313)

Admission to schools of pharmacy by transfer occurs after one or two years of coursework at Ohio University — some schools expect transfer after one year, others require two years of work, and others allow either option. Requirements for admission vary widely from school-to-school.

**Students anticipating transfer to a school of pharmacy should determine as early as possible the specific admission requirements of the schools to which they may apply and plan their academic programs accordingly.**

The program of courses listed below is based upon the requirements of the four pharmacy schools in Ohio. The listing of alternative course sequences (labeled with asterisks), reflects some of the differences in the requirements of the various schools. There are other less obvious differences that cannot be noted in this listing. Again it is the responsibility of the student to insure that admission standards for particular schools are met. Students should consult their advisor for assistance.

The following prepharmacy program is not a *degree* program; degrees in pharmacy are earned upon transfer to an appropriate professional school. However, accomplishment of the following, plus additional requirements, can lead to A.B. or B.S. degrees in chemistry or zoology at Ohio

University. There is no *in-absentia* arrangement for pharmacy.

#### Freshman

CHEM 151, 152, 153 Fundamentals of Chem. ....	15
MATH 163A, 163B Intro to Calculus ....	7
OR	
MATH 263A, 263B, 263C Analytic Geom. & Calc. (preferred) ...	12
ZOOL 170, 171, 172, 173 Intro to Zoology ....	14
ENG 151 English composition ....	5
Social Science and Humanities electives.	

#### Sophomore

CHEM 301, 302 Organic Chemistry ....	6
AND	
CHEM 303, 304 Organic Laboratory ....	5
OR	
CHEM 305, 306, 307 Organic Chemistry ....	9
AND	
CHEM 308, 309 Organic Chemistry ....	6
PHYS 201, 202, 203 Intro to Physics ....	12
MICR 411 General Microbiology ....	6
ZOOL 300 Anatomy & Histology ....	6
One additional English course.	
Social Science and Humanities electives.	

## Preparation for Physical Therapy

This program is an important preprofessional program in the Department of Zoological and Biomedical Sciences.

Ohio University offers a unique opportunity to the prospective physical therapist. Recognized as a leader in the development of preprofessional physical therapy curricula since the 1930s, the Department of Zoological and Biomedical Sciences works cooperatively with the School of Physical Therapy in Ohio University's College of Health and Human Services. In addition, the optional plans described below will adequately prepare the student to be highly qualified for admission to most other schools of physical therapy. It is important to note that some professional programs require special prerequisites, either courses or practical experience, of a student prior to application for admission. It is the student's responsibility, in consultation with his or her academic advisor, to determine any special prerequisites.

To be eligible for admission to an accredited professional school of physical therapy, the student must complete baccalaureate-level preprofessional preparatory coursework and then apply, on a competitive basis, to a professional school of physical therapy.

Students are encouraged to note particularly the opportunities provided by the Ohio University School of Physical Therapy. The professional program at Ohio University, in the process of elevation to an M.S. program, is designed to accept students on a competitive basis. As long as physical therapy at Ohio University offers a baccalaureate degree, a minimum of three years of undergraduate prephysical therapy academic preparation is required. When the Ohio University Physical Therapy Program offers the M.S. degree, a baccalaureate degree will be required for admission. Some schools of physical therapy at other universities require only two or three years of undergraduate academic coursework for admission. If the student is accepted, the professional program will extend for an additional two years, culminating in a B.S. degree in physical therapy from that professional program. (For more information, please see Physical Therapy, School of, in the Index.)

At this time, those students who complete the prephysical therapy program and then complete the professional program at Ohio University will be eligible to receive both the B.S. degree with a major in zoology or the A.B. degree with a major in psychology from the College of Arts and Sciences and a B.S. degree in physical therapy from the College of Health and Human Services.



The following prephysical therapy programs in the departments of Zoological and Biomedical Sciences and Psychology are designed also to provide students with the necessary academic preparation so that they may elect to transfer to a professional physical therapy program (if accepted) after two years (many professional programs require two years of prephysical therapy preparation) or to complete the necessary additional academic work for a B.S. degree in zoological and biomedical sciences or a B.A. degree in psychology if they so desire.

### Zoology - Prephysical Therapy

(Zoology - Prephysical Therapy Major, major code #2507)

This program is strongly suggested for preparation to apply for admission to the Ohio University School of Physical Therapy. After completion of the necessary academic prerequisites and maintenance of at least a 3.0 grade-point average, the student will be eligible to apply to Ohio University's professional physical therapy program.

If students wish to apply for transfer to another professional program at the end of their sophomore or junior year, they also will be eligible to do this.

B.S. degree prephysical therapy students majoring in zoology will be required to complete the following program.

#### Freshman

CHEM 151, 152, 153 Fundamentals of Chem. ....	15
ENG 151 Freshman Comp.: Writing & Rhetoric .....	5
MATH 163A, 163B* Intro to Calculus .....	7
PHIL 101 Fund. of Phil. ....	5

OR

PHIL 120 Principles of Reasoning .....	4
PHIL 130 Intro to Ethics .....	4
ZOOL 170, 171, 172, 173 Intro to Zoology .....	14
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

#### Sophomore

CHEM 301*, 302* Organic (short) .....	6
PHYS 201, 202 Intro to Physics# .....	8
PSY 101 General Psychology .....	5
PSY 121 Elem. Stats. for Behav. Sci. ....	5
PSY 273 Child and Adolescent .....	4
PT 259A Intro to Phys. Therapy .....	2
SOC 101 Principles of Sociology .....	5
ZOOL 301 Human Anatomy .....	6
ZOOL 325* Gen. Genetics .....	5
ZOOL 345 Human Physiology .....	4
ZOOL 346 Human Physiology Lab .....	3
ZOOL 352 Biomechanics .....	4

OR

ZOOL 420 Animal Locomotion .....	4
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

#### Junior-Senior

BOT 111* or MICR 211* .....	6 or 4
PSY 332 Abnormal Psych. ....	4
ZOOL 402 Human Neuroanatomy .....	3
ZOOL 445 Physiology of Exercise .....	4
ZOOL 446 Physiology of Exercise Lab. ....	3
ZOOL 463* Cell Chem. ....	4
ZOOL 479* Evolution .....	4
English composition .....	4
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

The following courses are suggested to serve as electives:

ANTH 101 Intro to Cult. Anthropology .....	5
ANTH 355 Med. Anthropology .....	4
CLNG 127 Greek and Latin Words in Eng. ....	4
HEFN 128 Intro to Nutrition .....	4
HSAT 129 Intro to Athletic Training .....	3
HSAT 326 Adv. Athletic Training I .....	3
HSAT 327 Adv. Athletic Training II .....	3
HLTH 202 Health Sci. & Lifestyle Choices .....	4
PHIL 231 Phil. of Sport .....	4

PHIL 331 Moral Problems in Med. ....	5
PSY 231 Psych. of Adjust. ....	4
PSY 275 Educational Psych. ....	4

\*Required for a B.S. in zoology-prephysical therapy.

#PHYS 203 may be required for admission to certain graduate and professional schools.

### Psychology - Prephysical Therapy

(Psychology - Prephysical Therapy Major, major code #4105)

This program prepares students to transfer to a physical therapy professional program after their sophomore or junior years. Because admission requirements for physical therapy programs vary, students who plan to transfer are urged to check the admission requirements for programs they wish to attend and make appropriate adjustments to the courses recommended below. Some programs require or highly recommend that students have volunteer experience related to physical therapy. Students should contact program directors to see if they have earned minimum hour and situation requirements for such experience. If not, students should plan adequate time to complete the requirement.

The courses listed below through the sophomore-junior years include current course requirements for admission to the Ohio University physical therapy program. If accepted, students may enter the Ohio University program after their junior year. Students who elect this option will receive the B.S. degree from the College of Health and Human Services after they complete the physical therapy program. For further information on the Ohio University program, application procedures, and requirements, students should contact the School of Physical Therapy or see the School of Physical Therapy listing in the College of Health and Human Services section of this catalog. Students should note that the Ohio University program in physical therapy may become a masters-level program which will require prior completion of a bachelor's degree.

Students who are not accepted into a physical therapy program or who wish to finish a baccalaureate degree before applying may complete the A.B. degree in psychology/prephysical therapy by taking the courses listed below plus additional Arts and Sciences requirements. Students who are pursuing the degree in psychology should plan sufficient time to complete the A.B. degree foreign language requirement.

The following program will not prepare students to complete a degree in zoology. If students who plan to pursue a career in medicine or certain allied health fields are not accepted into a physical therapy program, they should consult the programs in zoology.

#### Freshman

CHEM 121, 122, 123* Principles of Chemistry .....	12
Freshman composition .....	5
MATH 113 Algebra .....	5

OR

MATH 163A Introduction to Calculus .....	4
PSY 101 General Psychology** .....	5
PSY 121 Elementary Statistics** .....	5
PT 259A Introduction to Physical Therapy .....	2
SOC 101 Introduction to Sociology** .....	5
ZOOL 170, 171 Introduction to Zoology .....	10
Arts and Sciences degree requirements, and/or electives.	

#### Sophomore-Junior

PHYS 201, 202*** Introduction to Physics .....	8
PSY 212 Physiological Psychology .....	4
PSY 226 Experimental Psychology .....	4
PSY 273 Child and Adolescent Psychology .....	4
PSY 332 Abnormal Psychology .....	4
ZOOL 301 Human Anatomy (sophomore) .....	6
ZOOL 345, 346 Human Physiology & Laboratory (sophomore) ...	7
ZOOL 352 Biomechanics .....	4

OR

HPES 302 Kinesiology (must be section for prephysical therapy majors) .....	4
ZOOL 445, 446 Physiology of Exercise & Laboratory .....	7
ZOOL 402 Human Neuroanatomy .....	3
PHIL 101 Fundamentals of Philosophy .....	5
PHIL 130 Introduction to Ethics .....	4
OR	
PHIL 331 Moral Problems in Medicine .....	5
ENG 305J Technical Writing (junior) .....	4
OR	
ENG 308J Advanced Composition (junior) .....	4
Tier II (A or T area) .....	4-5
Arts and Sciences degree requirements, and/or electives.	

#### Junior-Senior

PSY 374 Adulthood and Aging .....	4
ONE OF:	
PSY 201 Sensation and Perception .....	4
PSY 203 Learning .....	4
PSY 304 Human Learning .....	4
PSY 308 Human Judgment and Decision Making .....	4
PSY 327 Human Psychophysiology .....	4
ONE OF:	
PSY 233 Psychology of Personality .....	4
PSY 351 Clinical and Counseling Psychology .....	4
PSY 380 Psychology of Health and Illness .....	4
PSY 430 Psychoactive Drugs .....	4
ONE OF:	
PSY 275 Educational Psychology .....	4
PSY 315 Behavior Genetics and Individual Differences .....	5
PSY 376 Psychological Disorders of Childhood .....	4
TWO OF:	
PSY 261 Industrial and Organizational Psychology .....	4
PSY 310 Motivation .....	4
PSY 336 Social Psychology .....	4
Tier III (senior) .....	4-5
Arts and Sciences degree requirements, major courses, and/or electives.	

\*The 120 chemistry sequence is usually sufficient for physical therapy programs. Other biomedical and allied health areas may require the 150 chemistry sequence. The regular psychology major does not require chemistry.

\*\*Students completing the A.B. degree in psychology-prephysical therapy and planning to start college-level foreign language with a course beyond 111 are advised to begin foreign-language in the freshman year and to complete PSY 101, PSY 121, and/or SOC 101 in the sophomore year. Students starting foreign language with 111 should begin language courses no later than the junior year.

\*\*\*PHYS 203 may be required for admission to certain graduate and professional schools of physical therapy.

## Political Communication Certificate Program

The colleges of Arts and Sciences and Communication jointly sponsor the undergraduate Political Communication Certificate Program for students in any major program within the University who want to gain knowledge and understanding about the arena of political communication. Political communication encompasses the interactions of political figures, political interests, the press, and the public in their attempts to shape political decisions. Completion of this program is officially recognized on the student's transcript upon graduation, and a certificate is awarded.

See the Courses of Instruction section of this catalog for the Political Communication Program requirements.

## Preparation for Public Administration

(Political Science-Public Administration Major, major code #4200)

The interdisciplinary program in public administration is designed to provide broad training in preparation for a career with local, state, or federal government in the areas of budgeting, personnel administration, intergovernmental relations, program planning and evaluation, and in general administration.

Students in the program must meet general requirements for the Bachelor of Arts degree and the requirements for a major in political science in the College of Arts and Sciences. Students also should be careful to meet the prerequisites for all courses. Students are encouraged to gain as broad an understanding of politics as political science majors, since politics is a crucial element in public administration.

For further information and advice, please consult the public administration advisor in the Department of Political Science, 222 Bentley Hall.

#### Freshman

ACCT 201 Financial Acct. ....	4
ECON 103 Prin. ....	4
ECON 104 Prin. ....	4
POLS 101 Am. Nat. Govt. ....	4
POLS 102 Issues in Am. Politics ....	4
PSY 121 Elem. Stat. for the Behavioral Sciences ....	5
OR	
QBA 201 Intro to Bus. Stats. ....	4
University General Education Requirements, Arts and Sciences degree requirements, and/or electives.	

#### Sophomore

GEOG 326 Urban Geog. ....	4
MIS 100 Intro to Bus. Computing ....	3
POLS 210 Prin. of Pub. Admin. ....	4
University General Education Requirements, Arts and Sciences degree requirements, and/or electives.	

#### Junior

ECON 303 Microeconomics ....	4
OR	
ECON 304 Macroeconomics ....	4
POLS 386 Public Budgeting ....	4
AND/OR	
POLS 387 Fin. Mgt. in Govt. ....	4
POLS 304 State Politics ....	5
POLS 314 Org. Theory and Politics ....	4
Arts and Sciences degree requirements and/or electives.	

#### Senior

POLS 412 Pub. Personnel Admin. ....	4
POLS 429 Comparative Public Adm. ....	4
POLS 495* Pub. Affairs Internship ....	5-15
Arts and Sciences degree requirements and/or electives.	

\*Available to students with a 3.0 g.p.a. or above. All other students must consult advisor.

In addition to the courses outlined above, the student must select additional courses in political science to satisfy the requirements for a political science major. The major consists of a total of at least 45 hours in political science, including at least one course each from two of the following three areas: comparative politics, international relations, and political theory.

It is also recommended that students select additional coursework from the following:

ACCT 202 Managerial Acct. ....	4
ECON 425 Pub. Policy Econ. ....	4
ECON 430 Pub. Fin. ....	4
FIN 325 Managerial Fin. ....	4
POLS 410 Pub. Policy Analysis. ....	4
POLS 413 Admin. Law ....	5
POLS 417 Legislative Processes ....	5
POLS 424 Intergovernmental Relations ....	4
SOC 430 Soc. of Organizations ....	4

## Preparation for Theology and Religion

(English-Pretheology Major, major code #5233)

(History-Pretheology Major, major code #4213)

(Philosophy-Pretheology Major, major code #5242)

It is recommended that a student planning to enter a theological seminary or to do graduate study in religion

take a broad program of undergraduate courses including the following (with minimal quarter hours of credit suggested in each area): philosophy (12); Bible and history of religions (15); English composition and literature, and world literature (21); history, including HIST 354, 356C, and 370 (15); social sciences (21); foreign languages (18, preferably Greek, Latin, French, or German); natural sciences (9); public speaking (3). The course program should be arranged to meet the requirements of the Bachelor of Arts degree and the University General Education requirements. It is advisable to major in philosophy, English, or one of the social sciences. Students also should check the entrance requirements of the theological seminaries or graduate schools of their choice and plan their curricula accordingly.

## Preparation for Urban and Regional Planning

(Geography-Urban Planning Major, major code #4234)

This special curriculum is designed to provide some of the basic academic requirements for students considering careers in urban planning in the United States. While working toward a conventional Bachelor of Science degree in geography, students take certain required courses and select from an approved list of electives both inside and outside the Department of Geography which emphasize legal, social, political, and historical aspects of the planning profession. These courses simultaneously fulfill some of the department and college requirements. The distinctiveness of the curriculum comes from the direction given the student and the preselection of courses in which the student may enroll; it is this which separates this special curriculum from the general geography program. Students entering the course of study must abide by the regulations of the College of Arts and Sciences pertaining to undergraduate degrees. These include a minimum of 192 credit hours; requirements concerning the geography major, English composition, and foreign language; level of study; and area requirements in humanities, social sciences, and natural sciences. Students wishing to enroll in the preparation for urban and regional planning major should contact the chair of the Department of Geography as soon as possible, preferably not later than the beginning of their sophomore year.

The majority of job opportunities for planners are with government agencies at the local, state, and federal levels. Their activities largely concern administration and implementation of federal programs and continued funding depends upon the Congress. Whereas a bachelor's degree can facilitate initial entry into the planning profession, job descriptions usually specify a master's degree, and it is recommended that students continue toward such a degree, involving an additional two years of study, offered by over 70 American universities.

## Core Curriculum

Geography major requirements with these specifications: Hours over 300 must include:

326 Urban Geography .....	4
350 Land Use Planning .....	4
353 Environmental Planning .....	4
455 Evolution of Planning .....	4
Choice of two from this list:	
365 Remote Sensing I .....	5
466 Remote Sensing II .....	5
468 Automated Cartography .....	5
478 Geographic Information Systems .....	5
479 Adv. GIS .....	5

## Other Departments (17 hours)

These courses currently fulfill the social science area requirement of the College of Arts and Sciences.

ECON 103 Principles of Microeconomics .....	4
ECON 104 Principles of Macroeconomics .....	4
MGT 300 Management .....	4
POLS 320 Urban Politics .....	5

## Additional Courses to Fulfill Area Requirements of the College of Arts and Sciences\*

*Foreign Language Requirement* (24 credit hours). The language requirement is the same as for all other B.S. degree programs in the College of Arts and Sciences.

*Humanities Area Requirement* (18 credit hours). These requirements are the same as for all other B.S. degree programs in the College of Arts and Sciences. Select CA 350 Principles of Architecture (4) and CA 354 19th- and 20th-Century Architecture (4) in partial fulfillment of the Arts and Sciences humanities area requirement.

*Natural Science Area Requirement* (18 credit hours). This requirement is the same as that for all other B.S. degree programs in the College of Arts and Sciences. One or more of the following courses are recommended as partial fulfillment of the requirement:

GEOL 101 Intro to Geol. ....	5
GEOL 251 Water and Pollution .....	4
GEOL 330 Prin. of Geomorph. ....	5

\*The student and the advisor should devise a plan which accounts for the University General Education Requirements.

## Electives

Completion of the above requirements leaves 65 credit hours to be taken to fulfill the 192 credit hours necessary for graduation. The student should try to take these from among the following:

### Within the College of Arts and Sciences

Any Department of Geography courses EXCEPT GEOG 131 and 132

BUSL 370 Environ. Law .....	4
BUSL 442 Law of Property & Real Estate .....	4
ECON 213 Current Econ. Prob. ....	4
ECON 360 Money & Banking .....	4
ECON 301 Intro to Econ. Analys. ....	4
ECON 302 Intro to Econ. Analys. ....	4
ECON 303 Microecon. ....	4
ECON 304 Macroecon. ....	4
ECON 310 Urban Econ. ....	4
ECON 356 Regional Devel. ....	4
HIST 317A Ohio Hist. to 1851 .....	4
HIST 317B Ohio Hist. since 1851 .....	4
POLS 101 Amer. Nat. Govt. ....	4
POLS 102 Issues in Amer. Politics .....	4
POLS 410 Pub. Policy .....	4
POLS 424 Intergovernmental Relations .....	4
PSY 335 Environ. Psychology .....	5
SOC 101 Intro to Soc. ....	5
SOC 201 Contemp. Social Prob. ....	4
SOC 230 Soc. of Poverty .....	4
SOC 424 Urban Soc. ....	4
SOC 425 Soc. of Ag. ....	4
SW 101 Intro to Soc. Welfare and Social Work .....	3
SW 290 Amer. Social Welfare System .....	4
SW 391 Soc. Sec. System .....	4
SW 392 Contemp. Am. Soc. Services .....	4
SW 395 Aging in the Welfare State .....	4

### Outside the College of Arts and Sciences

CE 361 Transportation Engineering .....	4
HREC 310 Prog. Planning & Facil. for Recreation .....	5
INCO 205 Group Discussions .....	4
INCO 404 Prin. & Tech. of Interviewing .....	4
RET 101 Real Estate Prin. & Prac. ....	4
RET 201 Real Estate Appraising .....	4
RET 204 Real Estate Fin. ....	4

Additional coursework in civil engineering (415, 451, 452), botany (101, 101H, 102, 103, 311), microbiology (211, 212), zoology (390H), and economics is recommended as elective courses to be taken in the senior year.

## Preparation for Veterinary Medicine

(Zoology — Preveterinary Medicine Major, major code #2508)

Many schools of veterinary medicine require a bachelor's degree for admission. A standardized test (MCAT, GRE, or VAT) must be taken at least one year prior to when the student expects to enroll in veterinary school. Students should contact the veterinary schools of their choice or see their advisor to determine which standardized test must be taken.

Early in his or her college career the pre-veterinary medicine student should become familiar with the entrance requirements of the veterinary schools of his or her choice. Discussion of course selection with the student's academic advisor is strongly encouraged.

Pre-veterinary medicine students must meet the Arts and Sciences and University requirements and the requirements of the general zoology major (see Courses of Instruction section for requirements), and these requirements will fulfill prerequisites of most veterinary schools. Of the core requirements listed in the Courses of Instruction section, the following are recommended for pre-veterinary medicine students:

Area	Recommended Choice
Anatomy	ZOOL 303, Comparative Vertebrate Anatomy
Physiology	ZOOL 460, Animal Physiology OR ZOOL 448, Cell Physiology
Other Biol. Sci.	MICR 411

Recommended electives are:

MICR 414A Animal Virology (3)  
MICR 415 Immunology (6)  
ZOOL 406 Vertebrate Embryology (6)  
ZOOL 441 Parasitology (6)  
ZOOL 450 Principles of Endocrinology (4)  
ZOOL 452 Reproductive Physiology (3-4)

## Preparation for Water Resources

(Geological Sciences-Water Resources Major, major code #3322)

This curriculum is recommended for students who wish to specialize in the investigation of surface water and groundwater supplies. The student entering the program majors in geology as a B.S. degree candidate and takes additional coursework in mathematics, chemistry, and physics. Graduates of the program are qualified to seek professional employment in hydrogeology or to enter graduate school for additional training.

Students should enter the program as freshmen to complete the required curriculum in four years.

Freshman	
CHEM 151 Fundamentals of Chem.	5
CHEM 152 Fundamentals of Chem.	5
CHEM 153 Fundamentals of Chem.	5
GEOL 101 Intro to Geol.	5
GEOL 330 Prin. of Geomorph.	5
MATH 263A, 263B, 263C, 263D Analytic Geom. & Calc.	16
English composition	5
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

Sophomore	
GEOL 310 Rocks & Minerals	6
GEOL 350 Stratigraphy—Sedimentology	5
GEOL 360 Struct. Geol.	5
MATH 340 Diff. Equations	4
PHYS 251, 252, 253 Gen. Phys.	15
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	

Junior	
CS 321 Computing for Engineers and Scientists	5
ENG 305J Technical Writing	4

GEOL 480 Hydrogeology I	4
GEOL 481 Hydrogeology II	4
GEOL 483 (6) is to be taken during the summer following the third or fourth year.	
MICR 211 Environmental Microbiology	4
MICR 212 Environmental Microbiology Lab	2
Arts and Sciences degree requirements and/or electives.	

Senior	
CHEM 301 Organic Chemistry	3
CHEM 302 Organic Chemistry	3
GEOL 476 Subsurface Methods	4
GEOL 482 Groundwater Motion	4
Arts and Sciences degree requirements (including language), University General Education Requirements, and/or electives.	
Additional coursework in civil engineering (415, 451, 452), botany (101, 101H, 102, 103, 311), microbiology (211, 212), zoology (390H), and economics is recommended as elective courses to be taken in the senior year.	

## Preparation for Wildlife Biology

(Zoology-Wildlife Biology Major, major code #2515)

The Program in Ecology, Behavior, and Evolution, in the Department of Zoological and Biomedical Sciences, provides a program for undergraduate students in zoology who are interested in careers in the conservation and management of wildlife, or in the determination, establishment, and application of the biological facts, principles, methods, techniques, and procedures necessary for the conservation and management of wildlife. Graduates of this program will meet the course qualifications for state and federal civil service registers as ecologist, wildlife biologist, wildlife refuge manager, zoologist, and general biologist. This program will also provide undergraduate training for students planning to go on to graduate school in wildlife biology or an allied discipline such as mammalogy, ornithology, or animal ecology.

Freshman	
BOT 111 Intro to Bot.	6
CHEM 151, 152, 153 Fund. of Chem.	15
PSY 121 Elem. Stat.	5
ZOOL 170, 171, 172, 173 Intro to Zool.	14
English composition	5
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

Sophomore	
CHEM 301, 302 Organic Chem.	6
MATH 163A, 163B Intro to Calc.	7
PHYS 201, 202 Intro to Phys.*	8
ZOOL 275 Animal Ecology	4
ZOOL 325 Genetics	5
ZOOL 376 Field Ecology Lab.	3
Arts and Sciences degree requirements, University General Education Requirements, and/or electives.	

Junior-Senior	
English composition	4
ZOOL 460 Animal Physiology	4
ZOOL 479 Evolution	4
(1) A minimum of 16 hours in wildlife subjects selected from the following:	
ZOOL 471 Ornithology	5
ZOOL 474 Mammalogy	6
ZOOL 477 Population Ecology	4
ZOOL 485 Undergrad. Research	1-3
(2) A minimum of 14 hours in plant sciences, including BOT 111.	

\*PHYS 203 may be required for admission to certain graduate and professional schools.

## Women's Studies Certificate Program

This program is available as an option in any baccalaureate degree program offered by the University, regardless of the college in which the student is enrolled.

See the Courses of Instruction section of this catalog for the Women's Studies Certificate Program requirements.

## Preparation for Zoology-Nutrition

(Zoology-Nutrition Major, major code #2510)  
(Human Nutrition and Food Science, School of Home Economics, College of Health and Human Services, Option D, Nutrition-Zoology)

This program provides a basis for those students desiring graduate study and research in nutrition and/or zoology. The program meets American Dietetic Association academic requirements for the clinical area of specialization and qualifies students for dietetic internships with a clinical emphasis.

The course sequence should be adhered to closely and always in consultation with an advisor assigned to the student either in the Department of Zoological and Biomedical Sciences or in the School of Home Economics.

Should a student choose, he or she can major in the Department of Zoological and Biomedical Sciences, College of Arts and Sciences; or the same program may be pursued leading to a major in the School of Home Economics, College of Health and Human Services (see listing under Nutrition with Science (Zoology), Food and Nutrition, School of Home Economics, College of Health and Human Services).

### Freshman

CHEM 151, 152, 153 Fundamentals of Chem. ....	15
HEFN 128* Intro to Nutrition .....	4
MATH 163A, 163B Intro to Calc. ....	7
PSY 101 Intro to Psych. ....	5
ZOOL 170, 171, 172, 173 Intro to Zool. ....	14
English composition .....	5
Arts and Sciences college degree requirements, University General Education Requirements, and/or electives.	

### Sophomore

CHEM 301, 302 Organic Chem. ....	6
CS 220 Intro Comput. ....	5
OR	
HS 309 Microcomputer Appl. ....	4
ECON 103, 104 Intro to Econ. ....	8
HEFN 222* Food Science Prin. ....	4
HEFN 299* Soph. Practi.: Prof. Awareness .....	1
PHYS 201, 202 Intro to Phys.† .....	8
PSY 121 Elem. Stat. ....	5
PSY 275 Educational Psych. ....	4
ZOOL 325 Genetics .....	5
Arts and Sciences college degree requirements, University General Education Requirements, and/or electives.	

### Junior

HEFN 399* Field Experience .....	5
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HEFN 429* Community Nutrition .....	3
INCO 101 Fundamentals of Speech .....	4
OR	
INCO 103 Pub. Spkng. ....	4
MICR 411 General Microbiol. ....	6
OR	
MICR 211, 212 Environmental Micr. ....	6
MGT 300 Intro to Mgt. ....	4
ZOOL 303 Comp. Vert. Anat. ....	6
OR	
ZOOL 300 Anatomy and Histology .....	6
ZOOL 463 Cell Chem. ....	4
ZOOL 464 Physiological Chem. Lab. ....	3
English composition .....	4
Arts and Sciences college degree requirements, University General Education Requirements, and/or electives.	

### Senior

HEFN 400* Sr. Seminar .....	1
HEFN 422* Experimental Foods .....	4
HEFN 428* Adv. Nutrition .....	4
HEFN 430* Therapeutic Nutrition .....	4
HEFN 431* Studies of Science of Nutrition .....	4
HEFN 499A-499B Nutrition Counseling .....	5
SOC 101 Intro to Soc. ....	5
ZOOL 345 Human Physiology .....	4
ZOOL 479 Evolution .....	4
Arts and Sciences college degree requirements and/or electives.	

\*Students interested in dietetics must earn a 2.0 (C) in each HEFN course.

†PHYS 203 may be required for admission to certain graduate and professional schools.

Students majoring in zoology must fulfill Arts and Sciences degree requirements including a language (Spanish is recommended for this program).

Students pursuing this program in the School of Home Economics should see the listing under the College of Health and Human Services for specific degree requirements in that college.

If a student wants to qualify for an American Dietetics Association (ADA) internship, the following courses must be completed:

HEFN 120 Meal Management .....	3
HEFN 334 Quantity Food Production .....	4
HEFN 335 Food Service Purchasing .....	4
HEFN 382 Intermediate Nutrition .....	4
HEFN 426 World View of Nutrition .....	3
HEFN 437 Food Service Systems I .....	5
HEFN 438 Food Service Systems II .....	4
JOUR 250 Advertising Principles .....	4



# College of Business Administration

William A. Day, *Dean*

Frank J. Barone, *Associate Dean*

Herschel R. McNabb, *Assistant Dean*

Stephen B. Hyle, *Assistant Dean*

## THE COLLEGE

The College of Business Administration (CBA) seeks to prepare men and women for professional careers in business, government, and nonprofit organizations. Consistent with its purpose, the college provides a base of liberal education needed by all educated persons in our society, business-oriented instruction in professional fields, and a close association with other colleges to promote knowledge and understanding from a variety of sources.

Business instruction and research revolve around three themes: preparation of the manager for a variety of business activities; development of analytical skills; and fostering a critical awareness of the social, political, and economic environment in which decisions are made.

The academic departments offer major fields of study in accounting, business law, finance, general business, management, health care management, human resource management, international business, management information systems, marketing, production management, quantitative business analysis, and small business entrepreneurship. A major in business economics is also available.

The College of Business Administration has been a fully accredited member of the American Assembly of Collegiate Schools of Business since 1950.

## CAREER PLANNING AND PLACEMENT

The college provides career counseling and placement services through sponsorship of a College of Business Administration (CBA) career advisor. Funded in conjunction with the University's Office of Career Planning and Placement, the advisor helps students prepare for job interviews and job searches. The advisor maintains contact with on-campus recruiters and provides a referral service to companies which do not recruit on campus.

Students are encouraged to get to know the advisor early and to use the office's services and resources.

## INTERNSHIP PROGRAM

In addition to broad academic training through the B.B.A. degree program, CBA students can acquire profes-

sional experience through the internship program. This program is designed to benefit both student interns and sponsoring organizations. Students participating in the program have the opportunity to supplement their classroom learning with actual business experience. The host firm gains an additional staff person and the chance to evaluate the intern's potential for future employment.

To be eligible for consideration as an intern, students must have an accumulative grade-point average of at least 2.5 and must have earned 128 quarter hours of credit. These credit hours should include most core courses and public speaking.

Internships normally take place during the summer from mid-June to early September on a full-time basis. However, it is possible for an intern to work one quarter (approximately 10 weeks) during the academic year.

Information concerning sponsoring firms and applications are available through the office of the CBA Internship Coordinator.

## BACHELOR OF BUSINESS ADMINISTRATION

A candidate for the Bachelor of Business Administration (B.B.A.) degree must complete the University's General Education Requirements for graduation and fulfill a minimum of 192 quarter hours' credit with a point-hour ratio of 2.0 (C) average on all hours attempted. This 2.0 (C) point-hour requirement applies to courses taken in business and economics, and also to courses in the student's major. The College of Business Administration limits transfer credit for required business courses taken at a lower-division level to such courses as it offers at that lower level. Other transfer credits accepted by the University are evaluated as either business or nonbusiness electives.

Courses included in the 192-hour minimum for the B.B.A. degree must be chosen so that at least 77 quarter hours are earned in areas of business and economics and at

least 77 quarter hours are earned in nonbusiness areas. However, eight hours of economics principles may be counted in either minimum. Among the nonbusiness courses, a student must complete INCO 103, MATH 163A, MATH 250B, and at least six quarter hours in each of three broad areas: humanities, natural science, and social science. Only three quarter hours of activity-type courses in the area of health, physical education, and recreation are acceptable within the 192 hours of credit toward the B.B.A. degree. *A minimum of 48 credit hours must be completed after admission to the college in order to meet the college's residency requirement.*

## MINORS

Students outside the CBA who wish to complete a business minor may do so by completing 44 credit hours of the following:

<i>Required Courses</i>	<i>Hours</i>
ACCT 201 & ACCT 202 .....	8
ECON 103 & ECON 104 .....	8
BUSL 255 .....	4
QBA 201 or PSY 121 or ECON 381 or INCO 301 .....	4
<b>Total</b>	<b>24</b>

*Three of the following five courses:*

FIN 325, MGT 300, MIS 300, MKT 301, POM 310 .....	Total 12
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Two additional courses taken from the five courses listed above or two advanced courses in ACCT, BA, BUSL, FIN, HRM, MGT, MIS, MKT, POM, or QBA.

**Total 8**

CBA students may elect to complete minors offered by other areas within the University by completing the requirements established by that area.

Due to accreditation standards, students outside the CBA will be allowed to complete only 44 hours of courses in the business curriculum.

## ENROLLMENT POLICIES

### Freshman Policy

Freshmen will be admitted into the College of Business Administration on a selective basis. Normally, applicants will need to be in the top quarter of their high school class with a strong college preparatory curriculum. They are expected to have above-average scores on ACT or SAT tests, and also have demonstrated leadership potential through participation in extracurricular activities and/or work experience. Members of groups who are historically underrepresented in business will receive special consideration.

### Transfer Policy

A *limited* number of students from other colleges within Ohio University and students from other institutions of higher education will be permitted to transfer to the College of Business Administration. Applications for transfer are available from the Office of the Dean, CBA.

Any student contemplating transfer to the college is strongly encouraged to contact the Dean's Office as early as possible. Students must be enrolled in the CBA prior to their senior year to allow for the college's 48 hour residency requirement. To be considered for transfer, applicants must have completed INCO 103, ECON 103, ECON 104, MATH 163A, and ENG 151 or 152 or 153, or equivalent courses and have an accumulative grade-point average of 3.0 or higher. In calculating the grade-point average, grades from all colleges or universities attended will be used.

Students cannot be guaranteed admission even though they meet the above criteria. The College Admissions Committee will admit transfer students up to the college's enrollment ceiling. Those students judged to have the

highest probability of success will be admitted. Members of groups who are historically underrepresented in business will receive special consideration.

Applications for admission to the college should be submitted to the Office of the Dean, CBA, no later than the close of the fifth week of any quarter. The College Admissions Committee will evaluate applications during the second half of that quarter. Students approved for admission will officially transfer to the CBA at the beginning of the subsequent quarter.

Transfers from other universities must process the standard documents required by the Office of Admissions, as well as the application for the CBA. All applicants will be notified at the earliest opportunity of the admission decision.

## ACADEMIC PROBATION AND DISMISSAL

In addition to the University probation and drop regulations listed in the Credit and Grading section of this catalog, the CBA has established probation and drop regulations within the college.

## PREPROFESSIONAL CORE

Students must complete the preprofessional core with an accumulative grade-point average of 2.0 by the time they have earned 90 hours of credit. Students who do not meet these requirements may be given one quarter's probation to achieve the standard. If at the end of the probationary quarter a student has not fulfilled the requirement, he or she will be dropped from the college. Transfer students who have completed 90 hours or more before entering the CBA will be given two quarters to complete the preprofessional core before being put on probation. Preprofessional core courses include ENG 151 or 152 or 153, INCO 103, MATH 163A, MATH 250B, ACCT 201, ACCT 202, BUSL 255, MIS 100, ECON 103, ECON 104, and QBA 201.

## REPEATING A COURSE

Students will be limited to three attempts at all CBA core courses. Students who have attempted one of these courses a second time will be notified that they are allowed only three attempts. A student who has made three unsuccessful attempts at a required core course will be notified that he or she has been dropped from the college.

To attempt a course is to be enrolled long enough for the course to appear on the transcript or grade report. A letter grade, WP, WF, or grade replacement counts as an attempt. Attempts at another institution will count toward the limit if the course is taken as a transient student after enrollment in the College of Business Administration at Ohio University.

CBA core courses include ACCT 201, ACCT 202, ECON 103, ECON 104, MIS 100, QBA 201, BUSL 255, ECON 305, FIN 325, MGT 300, MGT 325J, MIS 300, MKT 301, POM 310, and BA 470.

## CURRICULUM

All candidates for the B.B.A. degree must complete a core of courses covering a common body of knowledge in the tools of analysis and the operational fields of business plus a concentration in the major area. Only the preprofessional core courses may be taken, as indicated below, during the freshman and sophomore years. This allows the student (1) to acquire an early foundation in the basic arts and sciences before specializing in business during the junior and senior years and (2) the flexibility to choose alternative

fields of study in cases of interest change. The recommended sequencing of courses is:

Freshman	
ECON 103, 104, Prin. ....	8
INCO 103 .....	4
MATH 163A Intro to Calculus .....	4
MIS 100 Intro to Microcomputers .....	3
Humanities (minimum) .....	6
Natural sciences (minimum) .....	6
Social sciences (minimum) .....	6
Electives .....	11

Sophomore	
ACCT 201 Financial Acct. ....	4
ACCT 202 Managerial Acct. ....	4
BUSL 255 Law & Society .....	4
MATH 250B Finite .....	4
QBA 201 Intro to Probabilities & Stat. ....	4
Electives .....	28

Junior	
ECON 305 Managerial Econ. ....	4
FIN 325 Managerial Finance .....	4
MGT 300 Mgt. ....	4
MGT 325J Business Communication .....	4
MIS 300 Bus. Information Systems .....	4
MKT 301 Mkt. Prin. ....	4
POM 310 Prod./Operations Mgt. ....	4
Major courses & electives .....	20

Senior	
BA 470 Administrative Policy .....	4
Major courses & electives .....	44

**NOTE:** For pass/fail option, see the Guidelines and General Information section of this catalog.

## MAJOR — AREA OF CONCENTRATION

Each candidate for the B.B.A. degree must designate a major or area of concentration and complete the courses required by the department offering the major. The majors are listed below. The course requirements for each major are indicated in this section.

Accounting  
Business Economics  
Business Prelaw  
Finance  
General Business  
Health Care Management  
Human Resource Management  
International Business  
Management  
Management Information Systems  
Marketing  
Production Management  
Quantitative Business Analysis  
Small Business Entrepreneurship

## PREPARATION FOR LAW SCHOOL

A student in the College of Business Administration who plans to enter law school should follow the Bachelor of Business Administration degree curriculum and also elect, with the approval of his or her advisor, courses in other fields, especially American government, American and English history, English, philosophy, interpersonal communication, and additional theory courses in the College of Arts and Sciences, except those which substantially duplicate material found in the typical law school curriculum.

The Ohio Supreme Court in its regulations governing the admission to the practice of law in Ohio provides that a student entering law school must be able to show possession of an undergraduate degree from an approved college if

he or she wishes to take the Ohio Bar Examination. However, the Ohio Supreme Court provides for one possible exception to the preceding regulation — if a person has earned, subsequent to graduation from law school, a bachelor's degree through completion of courses and credits other than those received in law school, and has made a record of academic achievement which is satisfactory to the Ohio Supreme Court, such a person may, in the court's decision, be permitted to apply for admission to the practice of law in Ohio. Law schools in the state of Ohio have supplemented this Supreme Court rule by requiring an undergraduate degree of all entering students, regardless of the state in which they plan to take the bar examination.

For the benefit of those students who do not plan to take the Ohio Bar Examination and who do not plan to seek admission to an Ohio law school, a degree in *absentia* program is available as described below.

A student who desires to (A) enter at the end of three years of college work a school of law located outside Ohio and (B) receive the Bachelor of Business Administration degree from Ohio University after completing the first year in law school may do so provided the following conditions are met: the student has the written approval of the dean of the College of Business Administration; a minimum of 144 quarter hours, including the required courses in the Bachelor of Business Administration degree curriculum (BUSL 255 excluded), are completed with a point-hour ratio of 2.0 on all hours attempted; a full year's work in an accredited law school is completed with an average equivalent to that prescribed for the bachelor's degree at Ohio University; and the student is eligible for advancement without condition to the second year.

If there is any possibility that a student might wish to take the Ohio Bar Examination, he or she is urged to obtain the undergraduate degree before entering the law school.

## The Accounting Major

(Major code #6121)

The baccalaureate program of the Department of Accounting prepares men and women for successful careers in the accounting profession.

The program provides the student with a broad knowledge of business concepts, an understanding of the accounting and reporting process, and basic skills in designing accounting information systems and using accounting data for decisions in business, government, and nonprofit organizations.

For the accounting major, the course requirements beyond the business core curriculum cover financial and managerial accounting, business law, information systems, tax, and auditing. Accounting elective courses are available to provide more depth in selected areas.

The Department of Accounting awards scholarships, based upon high school records and test scores, to entering freshmen who show outstanding potential for successful accounting careers.

## Suggested Course Sequence

### Freshman

Fall	
ECON 103 .....	4
MATH 163A .....	4
English .....	5
NonCBA elective* .....	3
<hr/>	
16	

Winter	
ECON 104 .....	4
MIS 100 .....	3
NonCBA electives* .....	9
<hr/>	
16	

<i>Spring</i>	
INCO 103 .....	4
NonCBA electives* .....	12
	16
Sophomore	
<i>Fall</i>	
ACCT 201 .....	4
MATH 250B .....	4
NonCBA electives* .....	8
	16
<i>Winter</i>	
ACCT 202 .....	4
QBA 201 .....	4
NonCBA electives* .....	8
	16
<i>Spring</i>	
ACCT 217 .....	4
BUSL 255 .....	4
NonCBA electives* .....	8
	16
Junior	
<i>Fall</i>	
ACCT 303 .....	4
MGT 300 .....	4
MGT 325J .....	4
MIS 300 .....	4
	16
<i>Winter</i>	
ACCT 304 .....	4
ACCT 317 .....	4
MKT 301 .....	4
NonCBA electives* .....	4
	16
<i>Spring</i>	
ACCT 305 .....	4
FIN 325 .....	4
POM 310 .....	4
NonCBA electives* .....	4
	16
Senior	
<i>Fall</i>	
ACCT 345 .....	4
ACCT 451 .....	4
ECON 305 .....	4
CBA elective .....	4
	16
<i>Winter</i>	
ACCT 310 .....	4
ACCT 406 .....	4
BA 470 .....	4
BUSL 357 .....	4
Accounting elective .....	4
	16
<i>Spring</i>	
Accounting elective .....	4
CBA elective .....	4
NonCBA electives .....	8
	16

\*To meet the nonCBA requirements of 77 hours, including two courses in humanities, natural sciences, and social sciences.

## Business Economics Major

(Major code #6124)

The B.B.A. business economics major is designed to provide a broad business background and is intended for

those who plan careers in business and economic research for both private firms and government, in banking, and in marketing analysis. It also is an important component for business management, law, production management, and financial analysis.

## Suggested Course Sequence

Freshman	
<i>Fall</i>	
ECON 103 Prin. ....	4
MIS 100 .....	3
Humanities .....	4
Natural science .....	4
<i>Winter</i>	
ECON 104 Prin. ....	4
MATH 163A Intro to Calculus .....	4
Natural science .....	4
Social science .....	4
<i>Spring</i>	
INCO 103 .....	4
Humanities .....	4
Social science .....	4
Electives .....	4
Sophomore	
<i>Fall</i>	
BUSL 255 Law & Society .....	4
MATH 250B .....	4
Electives .....	8
<i>Winter</i>	
ACCT 201 Financial Acct. ....	4
QBA 201 Intro to Prob. & Stat. ....	4
Electives .....	8
<i>Spring</i>	
ACCT 202 Managerial Acct. ....	4
CBA elective .....	4
Electives .....	8
Junior	
<i>Fall</i>	
ECON 304 Macroecon. ....	4
FIN 325 Managerial Finance .....	4
MGT 325J Business Communication .....	4
Elective .....	4
<i>Winter</i>	
ECON 305 Managerial Econ. ....	4
MGT 300 Management .....	4
MIS 300 Bus. Information Systems .....	4
Economics elective .....	4
<i>Spring</i>	
ECON 385 Intro Econ. Method & Res. ....	4
MKT 301 Mkt. Prin. ....	4
POM 310 Prod./Operations Mgt. ....	4
Elective .....	4
Senior	
<i>Fall</i>	
BA 470 Administrative Policy .....	4
Economics elective .....	4
Electives .....	8
<i>Winter</i>	
Economics elective .....	4
Electives .....	12
<i>Spring</i>	
Electives .....	16

**Business Prelaw Major**

(Major code #6120)

It should be recognized that law schools do not prescribe any rigid undergraduate curriculum. A very substantial number of prelaw students, however, do choose one of the business fields of study as their major field for the baccalaureate degree. They may wish to combine the business prelaw major along with one of the other majors in the College of Business Administration if the profession of law is to be their ultimate career goal.

The business prelaw major recognizes the business and economic emphasis of the practice of law, and also provides the breadth of training and philosophical background which is conducive to success in a law school.

Students majoring in business prelaw must complete the requirements for the business prelaw major in conjunction with the requirements for one of the other CBA majors, which include accounting, business economics, finance, general business, health care management, human resource management, management, management information systems, marketing, production management, and quantitative business analysis. In addition to following the requirements of one of the other majors in the College of Business Administration, students must complete 16 hours at the 300-400 level, including BUSL 356 and four additional hours in business law beyond 356 as selected by the student with the approval of his or her prelaw major advisor. A further eight hours should be selected from the following: ACCT 217 (Introduction to Taxation), ACCT 317 (Federal Income Taxes), ECON 430 (Public Finance), HRM 425 (Labor Relations), POLS 401 and 402 (Constitutional Law), POLS 409 (Law Enforcement), POLS 304 (State Politics), POLS 374 (Great Jurists), POLS 413 (Administrative Law), FIN 331 (Insurance), FIN 341 (Investments). Students may also request from their business prelaw advisors written permission to substitute a course different from those listed above. With their advisor's approval, students should elect additional courses in nonbusiness fields, especially American government, American and English history, English, philosophy, interpersonal communication, and in such business fields as finance.

The law faculty in the College of Business Administration is prepared to assist prelaw students in a number of ways:

1. Several departmental faculty members give extensive time to counseling students regarding selection of courses, the Law School Admission Test, law school application procedures, and other matters of importance to prelegal education.

2. Law School Admission Test (LSAT) and Law School Data Assembly Service (LSDAS) are available from the prelaw advisor.

3. The department maintains ties with the Criminal Justice Program administered by the University College.

4. The department maintains ties with faculty and staff at various law schools in the country.

**Suggested Course Sequence**

Following is a suggested program of study for the business prelaw major using management as the business major selected. This sequence will need to be modified if other business majors are chosen.

**Freshman****Fall**

ECON 103 Prin. of Econ. ....	4
ENG 151 Fr. Comp., Wrting. & Rhet. ....	5
Social science requirement .....	2-5
Elective (MATH 113 unless math background is strong) .....	5

**Winter**

ECON 104 Prin. of Econ. ....	4
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INCO 103 Pub. Spkng. ....	4
MATH 163A Intro to Calculus .....	4
Humanities requirements .....	4

**Spring**

Humanities requirement .....	2-5
Natural science requirement .....	4
MIS 100 Intro to Microcomputers .....	3
Elective .....	4

**Sophomore****Fall**

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Electives .....	8

**Winter**

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Natural science requirement .....	2-5
Elective .....	2-5

**Spring**

BUSL 255 Law & Society .....	4
Social science requirement .....	2-5
Electives .....	2-8

**Junior****Fall**

ECON 305 Managerial Econ. ....	4
MGT 300 Mgt. ....	4
MGT 340 Organizational Behavior — Micro Perspective .....	4
MGT 325J Business Communication .....	4

**Winter**

BUSL 356 Law of the Mgt. Proc. ....	4
FIN 325 Managerial Finance .....	4
HRM 420 Human Resource Mgt. ....	4
POM 310 Prod./Operations Mgt. ....	4

**Spring**

MGT 430 Mgt. System: Decision Making .....	4
MIS 300 Bus. Information Systems .....	4
MKT 301 Mkt. Prin. ....	4
Business prelaw course .....	4

**Senior****Fall**

BA 470 Admin. Policy .....	4
Management major elective .....	4
Business prelaw course .....	4
Advanced business law course .....	4

**Winter**

Management major elective .....	4
Supporting field elective .....	2-5
Business prelaw course .....	4
Elective .....	2-5

**Spring**

Supporting field elective .....	2-5
Elective .....	2-5
Elective .....	2-5

**Finance Major**

(Major code #6125)

The finance major prepares professionals who are concerned with the development and distribution of funds for economic and social purposes. Coursework is available in the fields of financial management (both national and international), commercial banking, financial institutions, security markets, and risk and insurance.

Typically, upon graduation, the finance major obtains direct entry positions in such areas as the financial banking community, insurance, government services, or in an array of industries which employ financial analysts, decision makers, financial strategists, budgeting officers, and planners.



**Suggested Course Sequence\*****Freshman****Fall**

ECON 103 Prin. of Econ. ....	4
MATH 163A Intro to Calculus ....	4
Electives** .....	8

**Winter**

ECON 104 Prin. of Econ. ....	4
MIS 100 Intro to Microcomputers ....	3
Electives** .....	9

**Spring**

INCO 103 .....	4
Electives** .....	12

**Sophomore****Fall**

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Electives** .....	8

**Winter**

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Electives** .....	8

**Spring**

BUSL 255 Law & Society .....	4
Electives** .....	12

**Junior****Fall**

ECON 305 Managerial Economics .....	4
FIN 325 Managerial Finance .....	4
POM 310 Production/Operations Management .....	4
Elective** .....	4

**Winter**

FIN 327 Banking and Financial Systems .....	4
FIN 341 Investments .....	4
MGT 300 Management .....	4
MKT 301 Marketing Principles .....	4

**Spring**

MGT 325J Business Communication .....	4
FIN 331 Risk and Insurance .....	4
MIS 300 Bus. Information Systems .....	4
Elective** .....	4

**Senior****Fall**

FIN 428 Mgt. of Financial Inst. ....	4
OR .....	
FIN 461 Problems in Bus. Finance .....	4
Electives** .....	12

**Winter**

BA 470 Administrative Policy .....	4
FIN 450 Credit and Lending .....	4
OR .....	
FIN 463 Capital Allocation .....	4
Electives** .....	8

**Spring**

FIN 455 International Finance .....	4
OR .....	
FIN 445 Portfolio Management .....	4
Electives** .....	12

\*The outlined courses are intended to act as a guide, not as a required sequence. For example, some freshmen should not take MATH 163A first quarter but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by the student consulting with a faculty advisor for guidance.

\*\*A minimum of 77 hours of nonbusiness courses is required including—six hours in humanities, six hours in natural science, six hours in social science, and the required eight hours of mathematics included in the core courses.

**General Business Major**

(Major code #6122)

The general business major prepares professionals on a broad basis for business careers. Five upper-level courses are required from the following areas/disciplines: accounting, quantitative business analysis, management, management information systems, business law, finance, marketing, production, business administration, and economics (economics course selection restricted to ECON 303, 304, 320, 332, 360, or 430). Each such course will be in a different functional area and/or discipline. This major is of special interest to those students who have a generalized view of business and do not possess strong interests in any one concentration.

Upon graduation, the general business major enters what may be the broadest area of positions of any major within the College of Business Administration. Recent general business majors have entered such fields as sales, banking, government services, personnel, advertising, small business entrepreneurship, production, and insurance.

**Suggested Course Sequence\*****Freshman****Fall**

ECON 103 Prin. of Econ. ....	4
MATH 163A Intro to Calculus ....	4
Nonbusiness electives** .....	8

**Winter**

ECON 104 Prin. of Econ. ....	4
MIS 100 Intro to Microcomputers ....	3
Nonbusiness electives .....	9

**Spring**

INCO 103 .....	4
Nonbusiness electives .....	12

**Sophomore****Fall**

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Nonbusiness electives .....	8

**Winter**

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Nonbusiness electives .....	8

**Spring**

BUSL 255 Law & Society .....	4
Nonbusiness electives .....	12

**Junior****Fall**

ECON 305 Managerial Econ. ....	4
POM 310 Prod./Operations Mgt. ....	4
Accounting 300-400 level .....	4
Business or nonbusiness electives .....	4

**Winter**

FIN 325 Managerial Finance .....	4
MGT 300 Mgt. ....	4
Finance 300-400 level .....	4
MIS 300 Bus. Information Systems .....	4

**Spring**

MGT 325J Business Communication .....	4
MKT 301 Prin. of Marketing .....	4
Management 300-400 level .....	4
Business or nonbusiness electives .....	4

**Senior****Fall**

BA 470 Administrative Policy .....	4
Marketing 300-400 level .....	4
Business or nonbusiness electives .....	8

*Winter*

BA, BUSL, MIS, QBA, or ECON .....	4
Business or nonbusiness electives .....	12

*Spring*

Business or nonbusiness electives .....	16
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\*The outlined courses are intended to act as a guide — not as a required sequence. For example, some freshmen should not take MATH 163A first quarter but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by the student consulting with a faculty advisor for guidance.

\*\*A minimum of 77 hours of nonbusiness courses is required including six hours in humanities, six hours in natural science, six hours in social science, and the required eight hours of mathematics included in the core courses.

**Health Care Management Major**

(Major code #6118)

Effective management is increasingly important to today's society because the complexity of the society breeds more and more institutions and organizations. This is particularly true in the area of health care services. In addition, health care has been one of the nation's most rapidly growing fields of employment. It is anticipated that fairly sizeable growth in the health care labor force will continue due to (1) continuing rising demand for quality health care, (2) the broadening scope of services defined as health care, (3) increasing health insurance coverage and federal and state financing, and (4) the changing nature of the population.

While recognizing the importance of a liberal education, our health care management curriculum is career-oriented. It is designed to prepare men and women for positions of responsibility (but not licensure) in hospitals, governmental or volunteer health agencies, health planning and regulatory agencies, and health insurance agencies.

As important as the courses taught, however, is the faculty teaching the courses. Students will work with fully qualified faculty in all health services management courses. We do not use graduate teaching assistants.

Students also will be expected to work closely with a faculty advisor. Their advisor will help them define a realistic career plan, reviewing their interests, strengths, and weaknesses. As an outgrowth of the student's career plan an educational program will be developed. We firmly believe that a close working relationship with a faculty advisor is important in ensuring a sound education.

In addition to the Bachelor of Business Administration degree requirements, a student majoring in health services management must complete the 20-hour health care management core plus at least three additional 4-hour electives at the 300 or 400 level.

The health care management core includes:

1. ECON 315—Economics of Health Care (Winter)
2. BUSL 360—Law of Health Care (Winter)
3. MGT 450—Management of Health Care Organizations (Spring)
4. ACCT 310—Cost Accounting (Fall, Spring)
5. HLTH 364—Health Field Experience

The health field experience is coordinated by Dr. Sue Foster, School of Health and Sport Sciences. It involves significant work experience in a health care organization and normally takes place in the summer between a student's junior and senior years. The health field experience must be arranged one full quarter before the time it is to be taken.

The three elective courses are selected in consultation with the major advisor. These courses are intended to provide additional background in a specialty area and may include nonbusiness as well as business courses. This specialty area prepares students to work in areas like accounting, finance, or human resource management in a health care setting.

**Suggested Course Sequence****Freshman***Fall*

ECON 103 Prin. of Econ. ....	4
ENG 151 Fr. Comp.: Writng. & Rhet. ....	5
Social science requirement .....	4
Elective (MATH 113 unless math background is strong) .....	5

*Winter*

ECON 104 Prin. ....	4
INCO 103 Pub. Spkng. ....	4
MATH 163A Calculus .....	4
Humanities requirement .....	4

*Spring*

Humanities requirement .....	4
Natural science requirement .....	4
MIS 100 Intro to Microcomputers .....	3
Elective .....	4

**Sophomore***Fall*

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Electives .....	8

*Winter*

ACCT 202 Managerial Acct. ....	4
QBA 201 Bus. Stat. ....	4
Natural science requirement .....	4
Elective .....	4

*Spring*

BUSL 255 Law & Society .....	4
Social science requirement .....	4
Electives .....	8

**Junior***Fall*

ECON 305 Managerial Econ. ....	4
FIN 325 Managerial Finance .....	4
MGT 300 Management .....	4
MGT 325J Business Communication .....	4

*Winter*

BUSL 360 Law of Health Care .....	4
ECON 315 Econ. of Health Care .....	4
POM 310 Production/Operations Mgt. ....	4
Health management elective .....	4

*Spring*

MGT 450 Mgt. of Health Care .....	4
MIS 300 Bus. Information Systems .....	4
MKT 301 Mkt. Prin. ....	4
Elective .....	4

**Senior***Fall*

BA 470 Admin. Policy .....	4
Major health management elective .....	4
Electives .....	8

*Winter*

ACCT 310 Cost Acct. ....	4
Major health management elective .....	4
Elective .....	4
Elective .....	4

*Spring*

Elective .....	4
Elective .....	4
Elective .....	4
Elective .....	4

In addition, the internship can be taken during the summer period or during the mid-year break, or during a quarter if arrangements can be made.

## Human Resource Management Major

(Major code #6130)

The demand for students with training in the area of human resource management is increasing quite substantially. The U.S. Department of Labor predicts that professional employment in human resource management will increase through the mid-1990s.

The Human Resource Management (HRM) major is designed to provide an educational background for students with a career interest in human resource management and/or labor relations in both private and public sector organizations. Specifically, the major provides basic preparation for entry-level positions in human resource management and the educational background which supports career advancement in this area. It also prepares students for a variety of positions in which a working knowledge of human resource management activities is critical to success on the job.

In addition to the B.B.A. requirements, a student majoring in human resource management must complete the following courses: BUSL 356 (Law of the Management Process), HRM 420 (Human Resource Mgt.), HRM 425 (Labor Relations), MGT 340 (Organizational Behavior-Micro Perspective), HRM 430 (Compensation Management), HRM 440 (Human Resource Training, Development, and Research), HRM 450 (Recruitment, Selection, and Appraisal), and HRM 460 (Human Resource Policy, Planning, and Information Systems).

Majors also are expected to select, with the help of their advisors, electives relevant to their career preparation. A sample of recommended electives follows: ACCT 310 (Cost Accounting), AAS 225 (History of the Black Worker), ECON 320 (Labor Economics), ECON 321 (Labor Legislation), ISE 422 (Seminar in Occupational Safety and Health), INCO 404 (Principles and Techniques of Interviewing), PSY 101 (General Psychology), PSY 241 (Behavioral Measurement), PSY 261 (Industrial Psychology), PSY 275 (Educational Psychology), PSY 336 (Social Psychology), and SOC 101 (Introduction to Sociology).

The student's advisor helps to define a realistic career plan, reviewing the student's interests, strengths, and weaknesses. As an outgrowth of the student's career plan an educational program will be developed. We firmly believe that a close working relationship with a faculty advisor is an important factor in ensuring a sound education.

Students may want to join the Ohio University Student Human Resource Management Association, a chapter of the Society for Human Resource Management. Presentations by personnel and industrial relations managers and field trips bring the members in contact with human resource managers and serve to complement formal classroom studies.

### Suggested Course Sequence

#### Freshman

##### Fall

ECON 103 Prin. of Econ. ....	4
ENG 151 Fr. Comp.: Wrting. & Rhet. ....	5
Social science requirement .....	4
Elective (MATH 113 unless strong math background) .....	3

##### Winter

ECON 104 Prin. of Econ. ....	4
INCO 103 Pub. Spkng. ....	4
MATH 163A Intro to Calculus .....	4
Humanities requirement .....	4

##### Spring

Humanities requirement .....	4
Natural science requirement .....	4
MIS 100 Intro to Microcomputers .....	3
Electives .....	5

#### Sophomore

##### Fall

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Electives .....	8

##### Winter

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Natural science requirement .....	4
Elective .....	4

##### Spring

BUSL 255 Law & Society .....	4
Social science requirement .....	4
Electives .....	8

#### Junior

##### Fall

BUSL 356 Law of Mgt. Process .....	4
ECON 305 Managerial Econ. ....	4
MGT 300 Management .....	4
MGT 325J Business Communication .....	4

##### Winter

FIN 325 Managerial Finance .....	4
HRM 420 Human Resource Mgt. ....	4
MGT 340 Organizational Behavior-Micro .....	4
POM 310 Production/Operations Mgt. ....	4

##### Spring

HRM 425 Labor Relations .....	4
MIS 300 Bus. Information Systems .....	4
MKT 301 Marketing Principles .....	4
Electives .....	4

#### Senior

##### Fall

BA 470 Admtn. Policy .....	4
HRM 430 Compensation Management .....	4
HRM 450 Recruitment, Selection, and Appraisal .....	4
Elective .....	4

##### Winter

HRM 440 Human Resource Train., Devel., & Research .....	4
Elective .....	4
Elective .....	4
Elective .....	4

##### Spring

HRM 460 Human Resource Policy, Plan., & Info Systems .....	4
Elective .....	4
Elective .....	4
Elective .....	4

## International Business Major

(Major code #6132)

Students majoring in international business must complete the requirements for the International business major in conjunction with any CBA major except general business or business prelaw. A total of 24 credit hours should be earned by combining courses from the following: (a) one 4-credit course from Tier II Third World Cultures or any foreign language (except Latin or Greek) at the intermediate level (211), (b) ECON 340 (International Trade), (c) MKT 441 (International Marketing), (d) FIN 455 (International Finance), (e) MGT 484 (International Comparative Management), and (f) BA 385 (Multinational Business).

In the event that one or more of the required courses are not offered in a given year, a student may substitute any of the following for the missing course(s): ECON 341 (International Monetary Systems). This course is preferable to others as a substitute for FIN 455. ECON 342 (International Economic Policy). This course is preferable to others as a substitute for BA 385. POLS 455 (International Law). **NOTE:** This course may be used as a substitute for any missing course.

**Suggested Course Sequence\*****Freshman****Fall**

ECON 103 Prin. of Micro. ....	4
MATH 163A Intro to Calculus ....	4
Nonbusiness electives ** .....	8

**Winter**

ECON 104 Prin. of Macro. ....	4
INCO 103 Public Speaking ....	4
MIS 100 Intro to Microcomputers .....	3
Nonbusiness electives ** .....	5

**Spring**

Nonbusiness electives ** .....	16
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**Sophomore****Fall**

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Nonbusiness electives ** .....	8

**Winter**

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Nonbusiness electives ** .....	8

**Spring**

BUSL 255 Law & Society .....	4
Third World cultures or modern language .....	4
Nonbusiness electives ** .....	8

**Junior****Fall**

ECON 305 Managerial Econ. ....	4
POM 310 Prod./Operations Mgt. ....	4
Conjunctive major course .....	4
Business or nonbusiness elective .....	4

**Winter**

FIN 325 Managerial Finance .....	4
MGT 300 Management .....	4
Conjunctive major course .....	4
MIS 300 Bus. Information Systems .....	4

**Spring**

MGT 325J Business Communication .....	4
MKT 301 Prin. of Marketing .....	4
Conjunctive major course .....	4
Business or nonbusiness elective .....	4

**Senior****Fall**

BA 470 Administrative Policy .....	4
ECON 340 International Trade .....	4
Conjunctive major course .....	4
Business or nonbusiness elective .....	4

**Winter**

FIN 455 International Finance .....	4
MGT 484 International Comparative Mgt. ....	4
Conjunctive major course .....	4
Business or nonbusiness elective .....	4

**Spring**

BA 385 Multinational Business .....	4
MKT 441 International Marketing .....	4
Conjunctive major course .....	4
Business or nonbusiness elective .....	4

\*The outlined courses are intended to act as a guide—not as a required sequence. For example, some freshmen should not take MATH 163A first quarter, but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by students consulting a faculty advisor for guidance.

\*\*A minimum of 77 hours of nonbusiness courses is required including six hours of humanities, six hours in natural science, six hours in social science, four hours of public speaking, four hours of Third World cultures or modern language, and the required eight hours of mathematics.

**Management Major**

(Major code #6126)

Effective management is increasingly important in today's society because the complexity of the society breeds more and more institutions and organizations. Managing is an important activity in each of these. Thus there is, and will continue to be, a strong demand for effective managers to plan activities, to provide direction, and to work effectively with other people to ensure that organizational goals are accomplished.

The management major curriculum is designed to provide an educational base for supervisors, executives, and administrators in business, government, and other institutions. In addition to the B.B.A. degree requirements, a student majoring in management must complete 28 hours of upper-level management courses numbered above MGT 325. Students may substitute BUSL 356 and/or HRM 420 for an upper-level management course.

Since managers function in different types of institutions and manage different types of operations, it is strongly recommended that all management majors select a supporting field of study. The supporting field should be selected to provide a strong base for the student's career development. Students normally select, in consultation with their advisors, three to five courses in the supporting field. Recommended courses for the following supporting fields are available in the department chair's office: manufacturing management, public administration, retail management, natural resource management, and international management. In addition, students may, in consultation with their advisors, tailor their own supporting fields to meet their own unique career goals.

A student majoring in management will be assigned an advisor who will work with the student to help define career goals based upon student interests, review strengths and weaknesses, and recommend relevant elective courses. Students are expected to meet with their advisors at least once each quarter.

**Suggested Course Sequence****Freshman****Fall**

ECON 103 Prin. of Econ. ....	4
ENG 151 Fr. Comp.: Wrting. & Rhet. ....	5
Social science requirement .....	3
Elective (MATH 113 unless strong math background) .....	4

**Winter**

ECON 104 Prin. of Econ. ....	4
INCO 103 Pub. Spkng. ....	4
MATH 163A Intro to Calculus .....	4
Humanities requirement .....	4

**Spring**

Humanities requirement .....	4
Natural science requirement .....	4
MIS 100 Intro to Microcomputers .....	3
Elective .....	5

**Sophomore****Fall**

ACCT 201 Financial Acct. ....	4
MATH 250B Finite Mathematics .....	4
Electives .....	8

**Winter**

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Natural science requirement .....	4
Elective .....	4

**Spring**

BUSL 225 Law & Society .....	4
Social science requirement .....	4
Electives .....	8

## Junior

<i>Fall</i>	
Management Major Course .....	4
ECON 305 Managerial Econ. ....	4
MGT 300 Management .....	4
MGT 325J Business Communication .....	4

*Winter*

FIN 325 Managerial Fin. ....	4
Management Major Course .....	4
POM 310 Production/Operations Mgt. ....	4
Elective .....	4

*Spring*

Management Major Course .....	4
MKT 301 Marketing Prin. ....	4
MIS 300 Bus. Information Systems .....	4
Elective .....	4

## Senior

<i>Fall</i>	
BA 470 Admin Policy .....	4
Management Major Course .....	4
Management Major Course .....	4
Elective .....	4

*Winter*

Management Major Course .....	4
Electives .....	12

*Spring*

Management Major Course .....	4
Electives .....	12

**Management Information Systems Major**

(Major code #6137)

The management information systems (MIS) major is unique in its emphasis on applying computers to build information systems for business applications; the approach is applications oriented rather than technical. MIS majors will be trained to assist with the rapidly progressing computerization of managerial functions. MIS majors can be expected to become expert managerial computer users or intermediaries between users and computer centers.

The hands-on emphasis of the program exposes students to a number of hardware and software solutions to common business problems. This training is designed to produce students who can quickly master computer technology so they will be able to adapt quickly to new technology and apply it to business problems as the software and hardware evolve. Being able to communicate with both management and computer specialists makes MIS graduates ideal candidates for positions in organizations that make use of information systems.

In addition to the core curriculum for all candidates for the B.B.A. degree, a student majoring in MIS must complete MIS 220, 225, 320, 325, 380, 420, and 495. Also, one additional course must be completed from the following: MIS 340, 350, 430, 440, 455, or 480. Elective courses include MIS 230, 235, and 240.

**Suggested Course Sequence**

## Freshman

ECON 103, 104 .....	8
INCO 103 .....	4
MATH 163A .....	4
MIS 100 Introduction to Microcomputers .....	4
Humanities .....	6
Social Science .....	6
Natural Science .....	6
Electives .....	10

## Sophomore

ACCT 201, 202 .....	8
BUSL 255 .....	4
MATH 250B .....	4

MIS 220 File Processing .....	4
MIS 225 Prototyping and Fourth Generation Lang. ....	4
QBA 201 .....	4
Electives .....	20

## Junior

ECON 305 .....	4
FIN 325 .....	4
MGT 300 .....	4
MGT 325J .....	4
MKT 301 .....	4
MIS 300 Business Information Systems .....	4
MIS 320 Business Systems I .....	4
MIS 325 PC LAN Applications .....	4
MIS 380 Business Database I .....	4
POM 310 .....	4
Electives .....	8

## Senior

BA 470 .....	4
MIS 420 Business Systems II .....	4
MIS 495 Management Information Systems .....	4
MIS Optional Requirement .....	4
Electives .....	32

**Marketing Major**

(Major code #6127)

Marketing is the lifeline of any organization. It links the organization with its customers. Vital not only to the maintenance of the survival of the organization, marketing is essential to the maintenance of the free enterprise system. The marketing curriculum is designed to give the student both a broad knowledge and an opportunity to specialize in any area of the student's choice. The marketing major prepares students to become professional marketing personnel via available coursework in personal selling and sales management, marketing research and consumer behavior, and marketing analysis and management (national as well as international).

Typically, upon graduation, the marketing major obtains direct entry positions in areas such as sales, sales management, and retail management with companies that specialize in analysis and description of the consumer and his or her attitudes and behaviors.

In addition to the B.B.A. core requirements, a student majoring in marketing must complete 24 hours of marketing courses at the 300-400 level including MKT 379 and MKT 463.

**Suggested Course Sequence\***

## Freshman

*Fall*

ECON 103 Prin. of Econ. ....	4
MATH 163A Intro to Calculus .....	4
PSY 101 Gen. Psych. ....	5
Nonbusiness electives** .....	3

*Winter*

ECON 104 Prin. of Econ. ....	4
MIS 100 Intro to Microcomputers .....	3
SOC 101 Intro to Sociology .....	5
Nonbusiness electives .....	4

*Spring*

ENG 151 .....	5
INCO 103 .....	4
Nonbusiness electives .....	7

## Sophomore

*Fall*

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Nonbusiness electives .....	8



*Winter*

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Nonbusiness electives .....	8

*Spring*

BUSL 255 Law & Society .....	4
Nonbusiness electives .....	4
Electives .....	8

*Junior**Fall*

ECON 305 Managerial Econ. ....	4
MIS 300 Bus. Information Sys. ....	4
MKT 301 Prin. of Mkt. ....	4
POM 310 Production/Operations Mgt. ....	4

*Winter*

FIN 325 Managerial Fin. ....	4
MGT 300 Mgt. ....	4
MKT 379 Marketing Research .....	4
Marketing elective .....	4

*Spring*

MGT 325J Business Communication .....	4
Marketing elective .....	4
Marketing elective .....	4
Marketing elective .....	4

*Senior**Fall*

BA 470 Administrative Policy .....	4
MKT 463 Mkt. Strategy .....	4
Marketing elective .....	4
Business or nonbusiness electives .....	4

*Winter*

Business or nonbusiness electives .....	16
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*Spring*

Business or nonbusiness electives .....	16
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\*The outlined courses are intended to act as a guide — not as a required sequence. For example, some freshmen should not take MATH 163A first quarter but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by students consulting a faculty advisor for guidance.

\*\*A minimum of 77 hours of nonbusiness courses is required including — six hours in humanities, six hours in natural science, six hours in social science, and the required eight hours of mathematics included in the core courses.

## Production Management Major

(Major code #6119)

The program in production management is primarily concerned with the effective management of the physical and human resources of an organization. By taking part in a study of an interdisciplinary curriculum, the student obtains a basic understanding of how to effectively manage facilities, equipment, and personnel, and their interactions in a variety of activities such as manufacturing/assembly, transportation, warehousing, research, or assembly-line operations.

The production management major is often called upon to design, construct, and operate elements in the input-transformation-output process/system. Those majoring in this program can expect to find career opportunities either in a supervisory capacity in an actual production operation or in one of the many staff assignments in manufacturing, such as methods and standards, evaluation of job content and design, production and inventory control, quality control, or in related fields such as purchasing, subcontracting, and industrial marketing.

## Suggested Course Sequence\*

*Freshman**Fall*

ECON 103 Prin. of Econ. ....	4
MATH 163A Intro to Calculus .....	4
Nonbusiness electives*** .....	8

*Winter*

ECON 104 Prin. of Econ. ....	4
MIS 100 Intro to Bus. Computers .....	3
Nonbusiness electives .....	9

*Spring*

INCO 103 .....	4
Nonbusiness electives .....	12

*Sophomore**Fall*

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Nonbusiness electives .....	8

*Winter*

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Nonbusiness electives .....	8

*Spring*

BUSL 255 Law & Society .....	4
Nonbusiness electives .....	12

*Junior**Fall*

ECON 305 Managerial Econ. ....	4
ISE 333 Work Design .....	5
POM 310 Prod./Operations Mgt. ....	4
Business or nonbusiness electives .....	3

*Winter*

FIN 325 Managerial Fin. ....	4
MGT 300 Mgt. ....	4
MIS 300 Bus. Information Sys. ....	4
Business or nonbusiness electives .....	4

*Spring*

ACCT 310 Cost Accounting .....	4
MGT 325J Business Communication .....	4
MKT 301 Prin. of Mkt. ....	4
Business or nonbusiness electives .....	4

*Senior**Fall*

BA 470 Admin. Policy .....	4
HRM 425 Labor Relations .....	4
POM 411 Prod./Operations Planning & Control .....	8

*Winter*

ISE 440A Industrial Plant Design** .....	2
MGT 340 .....	4
QBA 314 Introduction to Mgt Science .....	4
Business or nonbusiness electives .....	6

*Spring*

ISE 440B Industrial Plant Design** .....	3
POM 412 Prod./Operations Mgt Problems .....	4
Business or nonbusiness electives .....	5

\*The outlined courses are intended to act as a guide — not as a required sequence. For example, some freshmen should not take MATH 163A first quarter but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by students consulting a faculty advisor for guidance.

\*\*Substitutions can be made for ISE 440A and ISE 440B. See advisor for a list of substitute courses.

\*\*\*A minimum of 77 hours of nonbusiness courses is required including — six hours in humanities, six hours in natural science, six hours in social science, and the required eight hours of mathematics included in the core courses.

## Quantitative Business Analysis Major

(Major code #6128)

The undergraduate major in quantitative business analysis is designed primarily to prepare students for careers as analysts in a variety of functionally-oriented positions in industry or government. Knowledge of quantitative modeling techniques and how and when to use them is increasingly useful and important in today's business world. For example, statistical and quantitative models are integral parts of most computer-based decision support systems used in business and industry. Students majoring in quantitative business analysis (QBA) become good problem solvers. The major also provides the basic knowledge of quantitative methods and techniques that can provide the basis for graduate work in statistics or management sciences.

Students choosing this major are encouraged to obtain some depth of knowledge in some functional area of application within the college (beyond the core courses in that area) to complement their study of quantitative business analysis.

Graduates of the program in quantitative business analysis have obtained jobs requiring statistical competency (in quality control, marketing research, or financial research) or knowledge of the tools and techniques of management science (in internal management science groups, public accounting firms, management advisory services, or management consulting firms) or such competency or knowledge combined with substantial related computer literacy.

In addition to the core curriculum for all candidates for the B.B.A. degree in the College of Business Administration, a student majoring only in quantitative business analysis must take a minimum of 20 quarter credit hours of 300-400 level courses including QBA 314 and QBA 371. Three additional 300-400 level courses, two of which must be QBA courses or their equivalent, are required. One elective 4-hour course may be from an approved list of courses in the functional areas. CS 220, Intro to Computing or equivalent is also required for a total of 24 hours.

Specific programs also exist for dual majors in QBA and Production/Operations Management or QBA and Finance. Further information on these programs as well as one combining the QBA major with a MATH minor are available from the Management Systems department office.

While not required, students who are considering majoring in QBA are encouraged to take MATH 163B, Integral Calculus, and MATH 211, Elementary Linear Algebra, or their equivalent.

### Suggested Course Sequence

The first two years would be approximately the same for any sequence.\*

Freshman	
ECON 103, 104 .....	8
INCO 103 .....	4
MATH 163A† .....	4
MIS 100 .....	3
English and humanities .....	8
Social science .....	8
NonCBA electives**† .....	13
	48

Sophomore	
ACCT 201 & 202 .....	8
BUSL 255 .....	4
MATH 250B*** .....	4
QBA 201*** .....	4
Natural Science .....	6
NonCBA electives**† .....	22
	48

### Junior

ECON 305 Managerial Econ .....	4
FIN 325 Managerial Fin .....	4
MGT 300 Management .....	4
MGT 325J Business Comm. ....	4
MIS 300 Bus. Information Systems .....	4
MKT 301 Prin of Mkt. ....	4
POM 310 Production/Operations Mgt. ....	4
QBA 371 Statistical Analysis of Data (Fall) .....	4
QBA 314 Intro to Mgt. Science (Winter) .....	4
QBA elective or equivalent .....	4
Business or nonbusiness electives** .....	8
	48

### Senior

BA 470 Administrative Policy .....	4
CS 220 Intro. to Computing .....	5
QBA elective or equivalent .....	8
Business or nonbusiness electives** .....	27
	48

\*The outlined courses are intended to act as a guide — not as a required sequence. For example, some freshmen should take MATH 113 or another math course more basic before taking MATH 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by students consulting a faculty advisor for guidance.

\*\*A minimum of 77 hours of nonbusiness courses is required, including: six hours in humanities, six hours in natural science, six hours in social sciences, INCO 103, and the required eight hours of mathematics included in the core courses.

\*\*\*MATH 250B and QBA 201 constitute a two quarter sequence in Probability and Statistics and should be taken as close together as possible during one's sophomore year.

†While not required, QBA majors are encouraged to take MATH 163B and MATH 211, or their equivalent.

## Small Business Entrepreneurship Major

(Major code #6133)

Most new jobs in the United States are created by small business. The curriculum of the Small Business Entrepreneurship major is designed to serve students who wish to start or manage their own business, to work in a family-owned business, to manage a small business, or to manage branches or franchises of larger firms.

In addition to the B.B.A. core requirements, a student majoring in small business entrepreneurship must complete ACCT 218, Computer Application Software for the Small Business; FIN 452, Small Business Finance; BA 445, Small Business Administration; HRM 420, Human Resource Management; and four elective courses including at least one marketing course and one accounting course from the following: MGT 340, Organizational Behavior-Micro Perspective; BUSL 356, Law of the Management Process; ACCT 217, Introduction to Taxation; ACCT 310, Cost Accounting; ACCT 203, Accounting Information Systems; MKT 379, Marketing Research; MKT 444, Consumer Behavior; MKT 462, Product Development; POM 411, Production/Operations Planning and Control; and POM 412, Production/Operations Management Problems.

A student majoring in small business entrepreneurship will be assigned an advisor who will work with the student to help define career goals based upon student interests, review strengths and weaknesses, and recommend relevant elective courses. Students are expected to meet with their advisors at least once each quarter.

### Suggested Course Sequence

#### Freshman

Fall	
ECON 103 Prin. of Econ. ....	4
ENG 151 Fr. Comp.; Wrng. & Rhet. ....	5
Social science requirement .....	4
Elective (MATH 113 unless strong math background) .....	3

#### Winter

ECON 104 Prin. of Econ. ....	4
INCO 103 Pub. Spkng. ....	4

MATH 163A Intro to Calculus .....	4
Humanities requirement .....	4

*Spring*

MIS 100 Intro to Microcomputers .....	3
Humanities requirement .....	4
Natural science requirement .....	4
Elective .....	4

## Sophomore

*Fall*

ACCT 201 Financial Acct. ....	4
MATH 250B Finite .....	4
Electives .....	8

*Winter*

ACCT 202 Managerial Acct. ....	4
QBA 201 Intro to Bus. Stat. ....	4
Natural science requirement .....	4
Elective .....	4

*Spring*

ACCT 218 Computer App. Software for Sm. Bus. ....	4
BUSL 255 Law & Society .....	4
Social science requirement .....	4
Electives .....	4

## Junior

*Fall*

ECON 305 Managerial Economics .....	4
MGT 300 Management .....	4
MGT 325J Business Communication .....	4
Small Business Elective .....	4

*Winter*

FIN 325 Managerial Finance .....	4
MIS 300 Bus. Information Sys. ....	4
POM 310 Production/Operations Mgt .....	4
Small business major elective .....	4

*Spring*

HRM 420 Human Resource Mgt. ....	4
MKT 301 Marketing Principles .....	4
Small business major elective .....	4
Elective .....	4

## Senior

*Fall*

BA 470 Admin. Policy .....	4
Small business major elective .....	4
Elective .....	4
Elective .....	4

*Winter*

FIN 452 Small Business Finance .....	4
Small business major elective .....	4
Elective .....	4
Elective .....	4

*Spring*

BA 445 Small Business Administration .....	4
Elective .....	4
Elective .....	4
Elective .....	4

For further information concerning the majors listed, please contact the Office of Management Systems, 107 Copeland Hall, Ohio University, Athens OH 45701-2979.

# College of Communication

Paul E. Nelson, *Dean*

Thomas Dunlap, *Associate Dean*

Tom Daniels, *Associate Dean*

Sandra Haggerty, *Assistant Dean*

Glen Kerkian, *Assistant Dean*

## THE COLLEGE

The College of Communication includes the J. Warren McClure School of Communication Systems Management, the School of Interpersonal Communication, the E.W. Scripps School of Journalism, the School of Telecommunications, and the School of Visual Communication.

The college was created to meet more fully the communication needs of a changing society. New forms of communication, the growth of communication systems, and the need for better communication among peoples, races, economic groups, and nations were factors in Ohio University's decision to prepare graduates both for traditional roles and for a variety of new responsibilities.

The college is equipped to train graduates for professional careers in journalism, telecommunications, voice and data communication, visual communication, and organizational and interpersonal communication. The college operates on the assumption that professional competency in these areas calls for the highest proficiency in the field of specialization, plus the broadest liberal education in other disciplines.

The E. W. Scripps School of Journalism is fully accredited, with undergraduate sequences in advertising, news writing and editing, magazine journalism, photojournalism, public relations, and broadcast news.

The journalism school is recognized nationally for the quality of its more than 200 annual graduates who move into professional careers on leading newspapers, magazines, and news-gathering organizations, as well as into advertising and public relations positions. Careers take them to all parts of the world.

The School of Telecommunications is the third largest broadcasting program in the United States, and national surveys have ranked it as one of the best in the country. It has received Program Excellence and Academic Challenge awards from the Ohio Board of Regents for the quality of its instruction.

Study in telecommunications includes a broad-based education which prepares students for careers in the electronic media, including radio and television, cable, corporate media, and studio recording. Many opportunities are provided for hands-on experience while on campus,

including a campus radio network, a video production unit, WOUB AM-FM-TV, and others. A year-round internship program places qualified advanced students in one-term, full-time media jobs in the U.S. and abroad.

The School of Interpersonal Communication offers coursework in six program tracks: communication in human services, communication theory, legal communication, organizational communication, political communication, and speech education.

The School of Visual Communication prepares students for careers in informational graphics, multi-media, photo communication, and picture editing/page design.

Students graduating from the program are qualified to pursue careers in newspapers, magazines, and educational institutions.

The J. Warren McClure School of Communication Systems Management offers a four-year baccalaureate program leading to a degree in communication systems management. Coursework centers on the management and design of voice and data networks. The interdisciplinary approach, an internship program, and opportunities for hands-on laboratory experience prepare students for careers managing business communication networks, as well as for careers with major telephone companies and governmental agencies.

All programs of study at the undergraduate level lead to the bachelor's degree. More detailed descriptions and the requirements for the various majors offered in the schools are given in the pages immediately following.

Graduate programs leading to the M.A., M.S., and Ph.D. degrees are available in interpersonal communication, journalism, and telecommunications. These are described in detail in the *Graduate Catalog*.

## ADMISSION REQUIREMENTS

Freshman admission to the College of Communication's J. Warren McClure School of Communication Systems Management, School of Interpersonal Communication, E.W. Scripps School of Journalism, School of Telecommunications, and School of Visual Communication is

based on high school class rank, test scores and professional activities, as well as availability of openings in the academic unit to which the student applies.

Students who may receive additional consideration include those with demonstrated talent or experience, and/or those coming from historically underrepresented groups. For information on admission procedures, contact the school director.

### **TRANSFER POLICY**

In all cases it is recommended that students consult the transfer requirements of the individual schools for specific transfer requirements, but in general all students wishing to transfer into the college must have earned at least 48 quarter hours (32 semester hours) with a grade-point average of at least 2.5. Individual schools may have more rigorous standards. Students who may receive additional consideration include those with demonstrated talent or experience, and/or those coming from historically underrepresented groups.

This regulation applies to:

- Students transferring from other universities.
- Students transferring from other programs within Ohio University.
- Students transferring from one program to another within the College of Communication.

**NOTE:** A student must be enrolled one academic year (three consecutive quarters) or the final 48 hours in the unit conferring the degree.

### **DEGREES AND REQUIREMENTS**

The College of Communication offers curricula leading to the degrees of Bachelor of Science in communication (interpersonal communication, telecommunications, communication systems management) and Bachelor of Science in journalism (journalism and visual communication).

Each candidate for a degree in the College of Communication must satisfy the requirements established by the program in which he or she is enrolled. In addition to unit requirements for completion of the bachelor's degree, a student must check with the proposed program for entrance requirements which are separate from admission to the college. Those requirements are specified on the following pages.

Additionally, students are required to meet the General Education Requirements which have been established by Ohio University. Most University General Education courses, however, can be used to satisfy both program and University requirements. Consult with your advisor on the dual application of those courses.

The student must also have a minimum total of 192 earned hours with a 2.0 (C) average in his or her major and in all hours attempted in the program. Only the final hours earned when courses are repeated count toward graduation.

The minimum residency requirement for a student receiving a bachelor's degree from the College of Communication shall be the final year (three quarters) or the final 48 hours of credit. In certain cases exceptions may be made by the academic dean in consultation with the director of the school the student plans to enter.

### **ADVISING**

A student entering the College of Communication is assigned an advisor by the school he or she plans to enter. Advisors will be assigned on the basis of student interest. Faculty advisors assist in the preparation of a schedule each quarter so that the proper sequence of courses in the major and appropriately related courses are selected. *The student, however, is responsible for seeing that all requirements for the degree are being met.*

### **SCHOLARSHIPS**

Scholarships sponsored by the five divisions within the College of Communication for qualified undergraduate students are available on an annual basis. Inquiries on the scholarship program should be directed to the Dean's Office, College of Communication.

## **J. WARREN McCLURE SCHOOL OF COMMUNICATION SYSTEMS MANAGEMENT**

Phyllis Bernt, *Director*

### **BACHELOR OF SCIENCE IN COMMUNICATION SYSTEMS MANAGEMENT**

(Major code #5329)

Founded in the fall of 1980 as the Center for Communication Management, this was the first program of its type in Ohio and only the second in the United States at the baccalaureate level. It is a multidisciplinary major with students taking courses in nine other schools and departments, in addition to the J. Warren McClure School of Communication Systems Management. The program was designed with the assistance of the International Communications Association and other telecommunications professionals.

### **PURPOSES AND OBJECTIVES**

The purpose of the J. Warren McClure School of Communication Systems Management is to provide academic studies and research for the training of professionals in the field of voice/data telecommunications. Such communication managers help design, supervise, and operate specialized communication systems in private industry, common carriers, and the government.

Until the 1970s, professionals in the field were trained primarily within their companies. But with the rapid expansion of technology and its applications, professionals began to ask for help from higher education. The Ohio University program is the result of five years of consultation and planning with experts at both the academic and applied levels.

The program is based on the philosophy that the communication manager must have broad basic knowledge and skill in such diverse areas as technology, business, computer science, and written and oral communication.

While working toward their degrees, students are encouraged to gain practical experience through field studies, practica, and internships. Students are given opportunities to observe and use communication systems (voice, image, and data) in the school's laboratory and through tours of the University's Communication Network Services installation and other facilities.

### **TRANSFER STUDENTS**

Enrollment in the school is limited to promote quality instruction and effective advising. To assure that the best qualified students are admitted into the program, the following transfer policy has been instituted and applies to students wishing to transfer from other universities, from other colleges within Ohio University, or from other schools within the College of Communication:



- Transfer students will be considered only if they have completed 48 quarter hours (36 semester hours) with a minimum 2.5 g.p.a.
- Students applying for admission must complete the school's "Request for Admission" form and submit it by November 1 (for winter quarter admission) or by May 1 (for admission during the following fall quarter). The student's most recent checksheet and a one-page essay (the subject of which is specified on the request form) must accompany each "Request for Admission" submitted.
- In addition to grades, consideration will be given to activities, work experience, and statements of career interest and aspirations.
- Transfer requests will be evaluated and decisions made by the school's faculty.
- Additional consideration may be given to students with relevant professional experience or to those coming from historically underrepresented groups.

## INTERNSHIPS

Students are encouraged to incorporate an internship as part of their course of study. The school has a strong internship program, with over 30 sponsoring organizations. The internships are usually 12 weeks and take place during the summer; other arrangements are possible. Students are treated as regular staff members and are paid for their efforts.

Internships are awarded on a competitive basis. Students must be majors in the program; must have attained at least junior rank; must have completed COMT 100, 270, and 370; must have a g.p.a. of 3.0 in major courses and an overall g.p.a. of 2.75; and must have one quarter remaining on campus after the internship is completed. Students must enroll in the University for academic credit during the internship and may earn up to 12 hours of course credit for completion of all internship requirements.

Students must apply for consideration to the Internship Coordinator.

## CURRICULA AND REQUIREMENTS

A communication manager is asked to have reasonable familiarity with a number of concerns, both general and technical. The communication management major requires a multidisciplinary approach involving nine participating schools and departments, in addition to coursework offered by the school itself.

All majors in the program must earn a grade of C (2.0) or better in COMT 100 and COMT 270. Students with grades below C in either of these two courses will not be permitted to enroll in upper division COMT courses. Courses may be repeated as per University requirements.

Additionally, to remain active in the major, students must maintain a 2.0 average in *all* required courses, not solely those labeled as communication management courses.

A specialty track system is in place. Students are required to select one of three tracks: Management/Business Administration, Computer Science, or Technical. Students should request further information regarding these tracks from the school office.

Each major must complete the core courses, track requirements, and other University requirements.

Requirements are structured to meet simultaneously the University's General Education Requirements, as well as the needs of the major field.

### Core Courses

1. General  
ECON 103, 104 ..... 8

Freshman Tier I English .....	5
Tier I mathematics .....	4-5
Technical writing (ENG 305J) .....	4
Statistics .....	4
Other Tier requirements .....	

2. Technical and Business .....	
ACCT 201, 202 .....	8
BUSL 255 .....	4
MGT 300 .....	4
Two computer languages .....	10

3. General Communication .....	
INCO 101 and 103, 234, 245 .....	16
JOUR 221 .....	5
TCOM 308 .....	4

4. Communication Systems Management .....	
COMT 100, 270, 370, 375, 470, at least 3 topical seminars .....	32

5. Track requirements .....	20-25
Specific courses dependent upon track .....	

6. Electives .....	
As recommended by advisor .....	

Although a number of variables might affect the order in which an individual student would take the required and recommended courses, a typical year-by-year schedule may be obtained from the school office.

## SCHOOL OF INTERPERSONAL COMMUNICATION

Sue DeWine, *Director*

The School of Interpersonal Communication offers a liberal education, emphasizing the scientific and artistic basis of communication. It is firmly committed to providing quality instruction in the theoretical bases of human communication and the application of theory within a number of specific contexts. Students within the major choose areas of specialization and specific courses which can lead to professional or preprofessional competence in such fields as training and human resources, foreign service, law, politics and government, human services, labor-management relations, personnel, campaign and propaganda administration, and poll and survey research.

Students majoring in interpersonal communication must choose at least one area of specialization from the following possible emphases or major tracks: communication theory, organizational communication, political communication, communication in human services, legal communication, or speech education. In addition to satisfying the track requirement, all majors must have a 28-hour related area which complements the coursework composing the major track. The related area is designed in consultation with a faculty advisor who must approve the coursework composing the related area. Through its advising program the School of Interpersonal Communication makes every effort to identify the goals of its students and to design academically sound programs which address these goals.

## SPECIAL OPPORTUNITIES

### Internship Program

In order that the student have an opportunity to apply the theory of the classroom to the practical world of the workplace, the School of Interpersonal Communication supports a large and carefully supervised internship program. During the 1990-91 academic year, 30 interpersonal communication majors served as student interns within a

wide variety of occupational settings. Many of these internships were identified and developed by the students. The period of an internship is usually from five to ten weeks and can be taken for one to 15 credit hours. To qualify for an internship, a student must be a major in Interpersonal communication and must satisfy a series of school requirements. For more information regarding this program contact the school's internship director.

### Forensics Program

Through its forensics program, Interpersonal Communication provides the opportunity for all University students to meet outstanding undergraduates from 300 or more colleges or universities in intellectual competition. Approximately 30 tournaments at other schools and several held on campus enable students to develop skills in debate, extemporaneous speaking, oratory, rhetorical criticism, and oral interpretation. Excellence in scholarship and superior performance in speech communication are rewarded in several ways. Delta Sigma Rho-Tau Kappa Alpha national honorary is open to students in the upper third of their classes who excel in forensics. The Lorin C. Staats Award is given to the outstanding senior who has participated with distinction in several forensic areas. The outstanding junior or senior in debate receives the Francis McVicker Maxwell Award. A student need not be an interpersonal communication major to participate in the forensics program. For more information regarding Ohio University forensics, contact the director of the forensics program.

### Preparation for Law School

The Association of American Law Schools states that the goals of prelegal education are: (1) comprehension and expression in words, (2) critical understanding of the human institutions and values with which the law deals, and (3) creative powers in thinking. In addition, all Ohio law schools require an undergraduate degree from an approved institution before admission. A student in the School of Interpersonal Communication who plans to enter law or paralegal school finds excellent opportunities for meeting these goals.

The prelaw student in interpersonal communication will be individually counseled and advised in developing a total course of study to meet the intellectual challenges of the legal profession. Suggested areas of study include communication theory and practice, argumentation, legal oratory and communication, English composition and literature, history, political science, business law, behavioral sciences, humanities, comparative arts, economics, and philosophy.

Prelaw students are encouraged to investigate the legal communication track of the interpersonal communication major.

### Center for Communication Research

This is a center for the development and distribution of communication research studies. The center coordinates the research activity of scholars in the full range of communication disciplines and seeks federal, state, and private grants to support its research activity. A research lab houses videotaping equipment to study interpersonal communication interactions.

### TRANSFER REQUIREMENTS

Students who wish to transfer into the School of Interpersonal Communication must have earned at least 48 quarter hours (32 semester hours) of coursework with a minimum grade-point average of 2.5 to be considered for admission. Additional consideration may be given to

students with special talents or membership in historically underrepresented groups. Transfer applicants must submit a School of Interpersonal Communication Transfer Form by November 1 for winter quarter admission or by May 15 for summer/fall quarter admission. Approval of transfer requests depends on the ratio of applications to the number of available openings in the program. Because the number of applications may exceed the number of openings, simply meeting the minimum transfer requirements does not guarantee approval of a transfer request.

### DEGREE REQUIREMENTS

In addition to the three sets of tier requirements and the 192 total hours specified by the University, all majors in the School of Interpersonal Communication must complete: (1) a 24-hour sequence of core courses, (2) a set of courses which defines one of the six major tracks offered by the school, and (3) a 28-hour related area approved by a faculty advisor and designed to complement and supplement the substance of the major track. Students are reminded that only one approved Tier II course in the major field can be applied in partial fulfillment of the Tier II requirement. The appropriate section of this catalog should be consulted regarding similar constraints which may apply to Tier III requirements.

### Core Courses

All majors in the School of Interpersonal Communication must complete a 24-hour sequence of six courses composing a common core of knowledge. It is the intent of this requirement to provide all majors with foundation work upon which areas of specialization can be built. The six core courses are as follows:

INCO 101 Fundamentals of Human Communication .....	4
INCO 103 Public Speaking .....	4
INCO 205 Group Discussion .....	4
INCO 206 Communication in Interpersonal Relationships .....	4
INCO 234 Introduction to Communication Theory .....	4
INCO 342 Communication and Persuasion .....	4

### Major Track Requirements

It is the intent of the School of Interpersonal Communication to provide its majors with the best features of liberal arts and professional education. Through the tier requirements of the University and the core course requirements of the school, students are taught problem solving, thinking paradigms, and creative expression. It is through the major track that the interpersonal communication student establishes an area of specialization. The available tracks provide training in a broad spectrum of human communication. While the tracks provide focus to the major, they typically are not intended to be career specific. Instead, each track provides instruction applicable to a variety of potential careers subsumed by the content domain of the specific track. Each major is expected to satisfy the requirements of at least one of the following six tracks. Students should select a track in consultation with their faculty advisors.

### Communication Theory

(Major code #5340)

Wide exposure to human symbolic activity is the distinguishing feature of this major track. Classical through contemporary theories of communication are investigated. The role of language and the analysis of language are central concerns. A number of research techniques and tools through which communicative behavior might be studied and interpreted are emphasized. This track would be of prime interest for those students contemplating an advanced degree in communication theory or a related discipline.

1. Required Courses:
  - INCO 250 Introduction to Rhetorical Theory ..... 4
  - INCO 301 Empirical Research Applications  
in Communication ..... 5
  - INCO 433 Applications of General Semantics ..... 4
2. The following two courses:
  - INCO 245 Introduction to Organizational Communication ... 4
  - INCO 452 Psychology of Speech ..... 4

### Communication in Human Services

(Major code #5339)

Human service professionals and the agencies in which they work are concerned with meeting people's needs in such areas as physical and psychological health, child and family services, and social and economic welfare. Given the nature of their work, these professionals and agencies confront many special considerations necessary to understanding and engaging in human communication. The communication in human services track in interpersonal communication is designed to provide the student with broad exposure to these considerations. Courses emphasize the role of human communication in family dynamics and in health, communication processes in human service agencies, and important communication skills for the human service professions.

1. Required Courses:
  - INCO 408 Health Communication ..... 4
  - INCO 422 Communication in the Family ..... 4
2. Three courses selected from the following:
  - INCO 404 Principles and Techniques of Interviewing .... 4
  - INCO 410 Cross-Cultural Communication ..... 4
  - INCO 420 Gender and Communication ..... 4
  - INCO 430 Communication and the Campaign ..... 4
  - INCO 452 Psychology of Speech ..... 4

### Legal Communication

(Major code #5341)

This track is intended primarily as a preprofessional degree program for those students contemplating careers within the legal profession. The approach is to emphasize the role of communication in general and argumentation and debate in particular. The courtroom oratorical practices of masters such as Cicero, Strafford, Erskine, Hastings, Marshall, Webster, and Darrow are considered in detail. Other topics receiving emphasis within the track include a survey of rhetorical theory from the Golden Age of Greece to the present; interviewing principles and techniques; ethical and rhetorical implications of constitutional guarantees on political, social, and religious speech; and the theory, research, and practice of analyzing human messages produced in natural settings. The prelaw student should prepare broadly for a legal career. This major track provides one means of accomplishing this preparation.

1. Required Courses:
  - INCO 215 Argumentative Analysis and Advocacy ..... 4
  - INCO 315 Advanced Argumentation and Debate ..... 4
  - INCO 353A History and Criticism of Courtroom Oratory ..... 3
2. Three courses selected from the following:
  - INCO 250 Introduction to Rhetorical Theory ..... 4
  - INCO 404 Principles and Techniques of Interviewing ..... 4
  - INCO 412 Principles of Message Analysis ..... 4
  - INCO 442 Responsibilities and Freedom of Speech  
in Communication ..... 4

### Organizational Communication

(Major code #5342)

This major track provides a challenging program of study for those students aiming for professional careers and administrative positions in business, educational, governmental, industrial, labor, or other organizational units. The goal of this major track is to provide the student with a blend of theory- and experience-based instructional opportunities. The acquisition of communication skills and research techniques so vital to the contemporary organiza-

tion is emphasized within the track. These include public speaking, interviewing, small-group problem solving, campaign direction, and conference leadership, as well as historical, descriptive, and experimental methods in both field and laboratory settings. Recent graduates have secured public and private sector employment in such areas as training, personnel, organizational development, public affairs, fund raising, and information management.

1. Required Courses:
  - INCO 245 Introduction to Organizational Communication ... 4
  - INCO 301 Empirical Research Applications  
in Communication ..... 5
  - INCO 445 Practicum in Organizational Communication ..... 4
2. Two courses selected from the following:
  - INCO 401 Field Research Methodologies Communication .... 5
  - INCO 404 Principles and Techniques of Interviewing ..... 4
  - INCO 405 Principles of Conference Leadership ..... 4
  - INCO 430 Communication and the Campaign ..... 4

### Political Communication

(Major code #5343)

Those students with interests or career goals in some aspects of politics will find the Political Communication track appealing. Coursework incorporates skills in both the theories of political communication and its practice by noteworthy figures of various historical periods. Such areas as argumentation and debate; argumentation in the legal setting; persuasive strategies characteristic of current political communication; and the practices of such individuals as Hitler, Mussolini, Lenin, Wilson, Churchill, Roosevelt, Kennedy, and King receive attention. Theory-based topics include symbolic politics, the place of myth in politics, and the political elements of film, literature, and television.

1. Required Courses:
  - INCO 215 Argumentative Analysis and Advocacy ..... 4
  - INCO 352 Political Rhetoric ..... 4
  - INCO 353 Contemporary Rhetoric ..... 4
2. Three courses selected from the following:
  - INCO 250 Introduction to Rhetorical Theory ..... 4
  - INCO 301 Empirical Research Applications in Comm. .... 5
  - INCO 315 Advanced Argumentation and Debate ..... 4
  - INCO 401 Field Research Methodologies in Comm. .... 5
  - INCO 430 Communication and the Campaign ..... 4
  - INCO 442 Respons. and Freedom of Speech in Comm. .... 4

### Speech Education

This major track provides a program for students interested in high school teaching. The emphasis stresses a liberal arts education as related to interpersonal communication and professional preparation for state teaching certification. Within this area the student has two program options: a communication comprehensive emphasis or a speech emphasis. Completion of the comprehensive communication program will certify a student to teach speech, journalism, reading, and English, or any combination thereof, in high school. The other program will certify for speech only. For details of these programs, see the College of Education section of this catalog.

### Related Area Requirements

In addition to core courses and major-track requirements, all interpersonal communication majors must complete a 28-hour sequence in a related area. It is the function of this related area to complement or supplement the work of the major track. Related areas should be selected early but not until the major track is identified. The coursework composing the related area can come from one academic department or from several. Collectively, the related area coursework should constitute a unified body of knowledge having a definite relationship with the major track chosen by the student. All related areas must be approved by the student's faculty advisor.

## E.W. SCRIPPS SCHOOL OF JOURNALISM

Ralph Izard, *Director*

Thomas Peters, *Associate Director*

Patrick Washburn, *Assistant Director*

### BACHELOR OF SCIENCE IN JOURNALISM

Ohio University's E.W. Scripps School of Journalism is accredited by the Accrediting Council on Education in Journalism and Mass Communication. It is one of a limited number of accredited schools and departments of journalism in the United States. No school in the country offers more accredited sequences.

### PURPOSES AND OBJECTIVES

The purposes of the E.W. Scripps School of Journalism are (1) to provide thorough, broadly based *professional* education and training in journalism and communications, leading to the B.S.J. and advanced degrees; (2) to provide *liberal* and *cultural* background in the arts, literature, languages, and social and natural sciences; (3) to promote scholarly research and achievements by the faculty and students; (4) to provide leadership and assistance to high school journalism and to professional associations on state, national, and international levels; and (5) to set high standards of journalism ethics.

Journalism today is a profession — like medicine, law, teaching, or engineering. It requires its practitioners to be culturally educated and professionally trained. Blending the liberal arts with professional courses, Ohio University journalism students take approximately three-fourths of their courses outside the professional school.

Six sequences are offered, all leading to the Bachelor of Science in journalism degree: advertising, magazine journalism, news writing and editing, public relations, broadcast news, and visual communication.

While there is overlap between journalism and telecommunications in broadcast news career preparation, students interested in being news writers, reporters, and anchors should enroll in the E.W. Scripps School of Journalism, and students interested in studio and field production should enroll in the School of Telecommunications.

While working toward their degrees, students may serve on the staff of *The Athens Messenger*, an independently owned daily newspaper. The city editor, managing editor, sports editor, and features editor are faculty members of the E.W. Scripps School of Journalism. The student staff members of *The Athens Messenger* gather and write news, edit local and wire copy, write headlines, and prepare copy and layouts. This training prepares students to enter the profession immediately after graduation.

Practical experience also is available on a laboratory magazine, *Southeast Ohio*, and in graphics and advertising laboratories. Many students add to their experience by helping edit *The Post*, the daily campus newspaper, or the *Athena*, the University yearbook.

In broadcast news, students get practical experience in preparing and broadcasting news over WOUB AM, FM, and TV, the University's radio and television stations, and the local cable television system.

Advertising and public relations students gain practical experience through specialized internships with agencies, corporations, hospitals, charitable groups, newspapers,

magazines, and broadcast stations. Students comprise the advertising staff of *Southeast Ohio* magazine and serve in public relations capacities with University and community organizations.

### ADMISSION REQUIREMENTS

The E.W. Scripps School of Journalism admits only the best academically and professionally qualified students who normally rank in the top 15 percent of their high school classes. Students with lower class rankings are considered if they have outstanding SAT or ACT scores. In addition, students who demonstrate notable talent or experience or have been historically underrepresented in the school will be given special consideration for admission.

### TRANSFER STUDENTS

The following policy has been established by the E.W. Scripps School of Journalism as a means of selecting the best-qualified students for the program. The academic quality of the curriculum depends in part on maintaining enrollment at a number which may be effectively served by our faculty. The school is dedicated to top-quality instruction, and this policy is one means through which to achieve that goal.

1. A total of up to 40 students will be accepted annually as transfer students into the E.W. Scripps School of Journalism.
2. Transfer students from within or outside Ohio University will be considered only when they have accumulated at least 48 quarter hours (32 semester hours) with a minimum 2.5 grade-point average.
3. In addition to grades, consideration will be given to test scores, grades in journalism classes, journalism background in a program offered by the school (professional, college, or high school), letters of recommendation, and personal statements of intent.
4. Transfer applications will be considered for admission only in the fall quarter.
5. Students may apply for transfer only through use of the E.W. Scripps School of Journalism "Application for Transfer" form. This form may be obtained by writing to the Admissions Committee.
6. Official transcripts, letters, and other supporting documents must be attached to the "Application for Transfer" at the time of its submission.
7. Evaluations will be conducted and decisions made by a special faculty committee.
8. Applications for transfer should be received by the School of Journalism no later than the closing date of the winter quarter. At this time, students may be granted provisional admittance if they will have achieved the required 48 quarter hours by the time of the fall quarter admission.

### INTERNSHIP PROGRAM

Consistent with its policy of combining classwork with practical training, the E.W. Scripps School of Journalism offers an internship program to qualified students. Many of these internships are developed by the student. The period of internship is typically ten weeks. The intern is provided with as varied "hands on" experience in media-related organizations as possible and may be paid a moderate stipend. Internship facilities are located throughout the nation and abroad.

## CURRICULA AND REQUIREMENTS

The Accrediting Council on Education in Journalism and Mass Communication includes among its accrediting standards the following provision: generally, three-fourths of the student's program should consist of courses in the liberal arts and sciences and one-fourth in professional courses in journalism.

Journalism students at Ohio University meet the above provision largely by fulfilling two sets of requirements: general and specialization area requirements. The first of these provides for a liberal arts and sciences core for all students, as follows:

- Political Science (2 qtrs)
- Sociology and/or Anthropology (2 qtrs)
- Economics (2 qtrs)
- Psychology (1 qtr) (except PSY 121)
- History (2 qtrs)
- English (2 qtrs) (one from ENG 305, 308, 309, or 319)
- Statistics (1 qtr) (from approved school list)
- Philosophy (2 qtrs) (one must be PHIL 120 or 320)
- Foreign Language (3 qtrs basic sequence or 1 qtr advanced)
- OR
- Science (3 qtrs as approved by advisor)
- Comparative Arts/Fine Arts (nonperformance courses) (2 qtrs)
- OR
- Afro-American and/or Women's Studies (2 qtrs)

To this liberal base, which should be the focus of the freshman year, journalism students add courses in a desired area or areas of specialization. This requirement may be filled by completing any one of three options:

1. a minimum of 36 hours in a single department within the College of Arts and Sciences (usually structured in accordance with the major requirements of the selected department),
2. a minimum of 18 approved hours in each of two departments in Arts and Sciences,
3. a minimum of 18 approved hours in one Arts and Sciences department and 18 approved hours in any other series of related courses.

Additional nonjournalism courses are required in some sequences. No course may be counted in more than one type of requirement. For example, a course used to meet a general requirement may not be applied to a sequence or specialization area requirement as well.

To assure the liberal stress of the overall program, the professional content of the B.S.J. is limited to one-fourth of the 192 hours required for the degree. Credits for all courses in journalism, telecommunications, photography, and visual communication should total at least 45 hours and not more than 55 hours. All professional hours beyond 55 must be compensated for by nonprofessional hours over the required 192-hour total. Nonjournalism courses which are required in sequences are not to be counted as part of the 45-55 total professional hours.

## Standards

1. To qualify for admission to JOUR 231 students must achieve at least 25 words per minute on a typing examination. This exam is administered on the first day of the JOUR 231 class.
2. To remain active in the B.S.J. program, a student must earn at least a C in all core courses.
3. No core course may be taken more than twice.

## Journalism Sequences

All journalism majors complete a basic 22-hour core of six courses. These are: JOUR 133, Precision Language for Journalists (4); JOUR 221, Graphics (5); JOUR 231, News

Writing (4); JOUR 233, Information Gathering (3); JOUR 411, Newspaper and Communications Law (3); and JOUR 412, Ethics, Mass Media, and Society (3). A grade of C or better is required in all core courses.

JOUR 105, introduction to Mass Communication, a freshman course, is optional.

The additional requirements for the various sequences are as follows:

### Advertising Management

(Major code #6932)

JOUR 250 Advert. Prin. ....	4
JOUR 321 Print Advert. & Layout ....	4
JOUR 323 Print Advert. Prac. ....	2
OR	
Approved internship	
JOUR 375 Advert. Media Plng. & Buying ....	4
JOUR 450 Advert. Copy Wrng. ....	3
JOUR 482 R-TV Advert. & Mgt. ....	4
JOUR 486 Advertising Campaigns ....	5
Journalism electives to make 45-55 hours	
MKT 301 Mkt. Prin. ....	4

### Broadcast News

(Major code #6936)

JOUR 350 Radio Broadcast News ....	4
JOUR 352 TV Broadcast News ....	4
JOUR 353 Broadcast News Prac. ....	2
OR	
Approved internship	
JOUR 452 Broadcast News Production ....	4
JOUR 455 Seminar in Brdst. News ....	3
JOUR 458 TV News Practice ....	4
JOUR 464 Reporting Public Affairs ....	3
Journalism electives to make 45-55 hours	

### Magazine Journalism

(Major code #6933)

JOUR 430 Mag. Ed. & Prod. ....	4
JOUR 431 Mag. Editing Practice ....	3
JOUR 441J Mag. Feature Wrng. ....	4
JOUR 443 Advanced Mag. Editing ....	3
OR	
JOUR 483 Mag. Publishing & Mgt. ....	3
Select two:	
JOUR 331 Rptng. Contemp. Issues ....	3
JOUR 363 Review & Crit. ....	3
JOUR 432 Specialized Mags. ....	3
JOUR 441 (second time) ....	4
JOUR 442 Adv. Mag. Feature Wrng. ....	3
JOUR 464 Rptng. Pub. Affairs ....	3
Journalism electives to make 45-55 hours	

### News Writing and Editing

(Major code #6934)

JOUR 311 Hist. of Am. Jour. ....	4
JOUR 331 Rptng. Contemp. Issues ....	3
JOUR 333 News Editing ....	4
JOUR 332 Rptng. Prac. ....	2
AND	
JOUR 334 Edit. Prac. ....	2
OR	
Approved internship	
JOUR 464 Rptng. Pub. Affairs ....	3
Select two:	
JOUR 350 Radio Broadcast News ....	4
JOUR 363 Review & Criticism ....	3
JOUR 441J Mag. Feature Wrng. ....	4
JOUR 442 Adv. Mag. Feature Wrng. ....	3
JOUR 465 Editorial Page ....	3
JOUR 468 Column Writing ....	3
JOUR 470 Sportswriting ....	3
Journalism electives to make 45-55 hours	



**Public Relations**

(Major code #6935)

JOUR 270 Intro to Public Relations .....	3
JOUR 331 Rptng. Contemp. Issues .....	3
JOUR 332 Rptng. Prae. ....	2
OR	
Approved Internship	
JOUR 333 News Editing .....	4
JOUR 370 Media Relations and Publicity .....	3
JOUR 430 Mag. Edit. & Prod. ....	4
JOUR 471 PR Prin. ....	5
JOUR 472 Adv. PR .....	4
Select one of the following:	
JOUR 350 Radio Broadcast News .....	4
JOUR 441J Mag. Feature Wrting. ....	4
JOUR 450 Advert. Copy Wrting. ....	3
Journalism electives to make 45-55 hours	
Select one course from SOC 210, 211, 412,	
413, or 414 .....	4

**Visual Communication**

Contact the School of Visual Communication for separate listing of requirements.

**CARR VAN ANDA PROGRAM**

A junior with a 3.0 accumulative average in journalism and a 2.5 accumulative average in all work may elect a sequence making up his or her own program in journalism. It will consist of the basic core of five courses plus the student's choice of journalism courses to equal 45-55 hours. The program must have the approval of the student's advisor and the director of the E.W. Scripps School of Journalism. Formal application is necessary.

## SCHOOL OF TELECOMMUNICATIONS

Joseph W. Slade, *Director*

The School of Telecommunications offers programs of study leading to bachelor's, master's, and doctoral degrees. The baccalaureate program is a professional degree program designed to prepare students for careers in all aspects of telecommunications. After two years of general education and basic telecommunications courses, students develop specialized sequences for the junior and senior years that combine a selection of courses within the major with complementary courses in other fields. Specific sequences in audio production, video production, and business aspects of telecommunications are offered on a competitive basis. While there is overlap between journalism and telecommunications in broadcast news career preparation, students interested in studio and field production should enroll in the School of Telecommunications, and students interested in being news writers, reporters, and anchors should enroll in the E.W. Scripps School of Journalism. The school also offers an Honors Tutorial program to qualified students (see Honors Tutorial College under the Colleges and Curricula section of catalog).

The classroom and laboratory experiences of students are augmented by a variety of practical experiences including work with Athens Video Works, the school's production unit, the All-Campus Radio Network, and the three University-owned and -operated stations: WOUB-AM, WOUB-FM, and WOUB-TV. Credit for such experiences is granted through TCOM 390.

Opportunities for internships, placement, and profes-

sional involvement are enhanced through the school's participation with the Ohio Association of Broadcasters, the Ohio Cable Television Association, the International Radio-Television Society, the National Association of Television Program Executives, and the National Association of Broadcasters.

Scholarships in the amount of \$750 per year are awarded to qualified freshmen. In addition, Dean's Achievement Scholarships and School of Telecommunications' awards are available to majors and premajors.

The Zanesville campus of Ohio University offers an associate degree program in electronic media, including a sequence in broadcast engineering. The department offers the student a smaller, more intimate setting for the first two years of university coursework. For additional information see "Radio-Television" in the Index of this catalog.

**TRANSFER POLICY**

Because the School of Telecommunications sets high academic standards and limits enrollment, students from other universities or other programs at Ohio University wishing to transfer into the school must show strong academic performance over their last three quarters. Students with a 3.0 g.p.a. for the past 48 hours will be admitted at any time. Students with between a 2.5 and a 2.99 for the past 48 credit hours may file a petition. A limited number of these students will be selected for admission each quarter.

A student who transfers into the school must be enrolled for one academic year (three consecutive quarters) or the final 48 hours of credit earned to graduate from the program.

## BACHELOR'S DEGREE IN TELECOMMUNICATIONS

**General Requirements for All Majors**

1. **Arts and humanities** — 20 quarter hours, including at least eight hours of 300- to 400-level courses (or 200-level or above for language courses). Courses include Tier I freshman and junior composition with balance of the hours chosen from art, art history, classical languages, comparative arts, English, film, modern languages, music, philosophy, and theater.

2. **Social sciences** — 20 quarter hours, including at least eight hours of 300- to 400-level courses. Courses may be chosen from anthropology, business, economics, history, international studies, management, marketing, political science, psychology, or sociology.

3. **Communication sciences** — 20 quarter hours, including at least eight hours of 300- to 400-level courses (or 200-level or above for language courses). Courses may be chosen from computer science, communication systems management, hearing and speech sciences, interpersonal communication, journalism, linguistics, modern languages, and visual communication.

4. **Mathematics and/or natural sciences** — Tier I quantitative skills plus 5 quarter hours chosen from astronomy, botany, chemistry, geology, mathematics, physical science, physics, physical geography, and zoological and biomedical sciences.

University General Education Tier II requirements can be used to fulfill the above requirements. Afro-American studies and University Professor offerings can be used to fulfill general requirements. All students must fulfill the Tier III requirement.

5. **Telecommunications** — the following core courses are required of all majors:

TCOM 170 Media Perspectives .....	4
TCOM 200A Telecomm. Writing and Production Planning .....	4

TCOM 206 Professional Options in Telecommunications .....	4
TCOM 453 Telecommunications Law & Regulations .....	4

## Sequence Requirements

Telecommunications freshmen and sophomores are considered premajors. Generally, premajors are not permitted to enroll in telecommunications courses above the 300 level. To be eligible to transfer from premajor status to one of the three major sequences described below, a student must attain a B- (2.67) average in TCOM 170, TCOM 200A, and TCOM 206; and have a program of study that satisfies one of the following sequences as approved by the student's advisor. The program of study should be developed by the student while enrolled in TCOM 206.

A student must take at least 20 hours in telecommunications after transferring into a sequence.

### Comprehensive Sequence

This plan of study offers students a broad exposure to telecommunications and also provides for specialization outside the School of Telecommunications. Program goals are developed jointly by student and advisor to provide adequate training in the specialization desired, and to ensure breadth of instruction in telecommunications. The following are required:

TCOM courses supporting program goals .....	32
Corollary courses supporting program goals .....	35
(from no more than two departments with at least 20 hours at the 300- to 400-level)	

### Professional Management/Administration Sequence

Students are selected for this sequence each spring on a competitive basis.

This plan of study aims to provide an understanding of the management process in telecommunications and to develop managerial skills. The following courses are required:

TCOM 459 Audience Research .....	4
TCOM 360 Telecommunications Mgt. ....	4
TCOM 461 Telecommunications Financial Mgt. ....	4
TCOM 462 Broadcasting and Cable Sales Mgt. ....	4
Telecommunications electives with advisor approval .....	16
Corollary courses supporting program goals .....	35

These courses may be selected from accounting, business administration, business law, computer science, economics, management, and marketing. They must include ECON 103, ECON 104, and MGT 200 or 300.

### Professional Video Production Sequence

Students are selected for this sequence each spring on a competitive basis. This plan of study is aimed at providing advanced skills in video production with special emphasis on the creative responsibilities of production and direction. The following courses are required:

TCOM 200C Video Production I .....	4
TCOM 308 Technical Bases of Telecommunications .....	4
TCOM 317 TV Studio Operations .....	2
TCOM 318 Video Production II .....	4
TCOM 319 Video Production III .....	4
TCOM 418 Producing for Video .....	4
Telecommunications electives with approval of advisor .....	12
Corollary courses supporting program goals .....	35

These courses may be selected from the visual or performing arts. Suggested areas include theater, film, music, graphic arts, and photography.

### Professional Audio Production Sequence

Students are selected for this sequence each spring on a competitive basis. This plan of study is aimed at providing advanced skills in music recording, commercial production, audio drama and documentary, and experimental forms.

TCOM 200B Audio Production .....	4
TCOM 308 Technical Bases of Telecommunications .....	4
TCOM 313 Field Audio Production .....	4
TCOM 413 Studio Audio Production I .....	4
TCOM 414 Studio Audio Production II .....	3
Telecommunications electives with approval of advisor .....	15
Corollary courses supporting program goals .....	35

Suggested areas include music theory, history and literature, hearing and speech sciences, business, film, electronics, and industrial technology.

### Internships

Majors are encouraged to undertake an internship in the spring or summer quarter of their junior year, or during their senior year. An internship provides 8 or 12 hours of credit (four credits can apply to the major) for full-time work with an approved sponsor during an academic term. To qualify for an internship, a minimum accumulative grade-point average of 2.7 is required. Students are required to initiate internships through the internship coordinator.

### Other Requirements and Standards

No course which is selected to fulfill any requirement may be taken on a pass/fail basis by a telecommunications major.

No course may be counted toward more than one type of requirement. For example, a course used to meet a general requirement may not also be used to meet a sequence requirement.

## SCHOOL OF VISUAL COMMUNICATION

Charles L. Scott, *Director*

The College of Communication, in conjunction with the College of Fine Arts, offers a visual communication degree program with four specialized sequences. The school has twice been recognized by the Ohio Board of Regents as a Program of Excellence. Students can earn either a Bachelor of Science in journalism or a Bachelor of Fine Arts degree.

The program is designed to provide students with realistic and thorough, broad-based, professionally-oriented training in visual communication and journalism, while providing the necessary liberal arts and cultural background for a strong educational foundation.

Intensive training is offered in picture editing/page design, photo communication for newspapers and magazines, photo illustration, multimedia, and informational graphics.

### GOALS OF THE SCHOOL

The goals of the School of Visual Communication are (1) to equip students with the necessary skills to be successful in the media and the background and motivation to enable them to compete for leadership roles in the field; (2) to

provide assistance and professional guidance in visual communication to working photographers, editors, and other personnel, newspapers, press services, magazines, industrial photographic departments, trade associations, multi-media and educational media production units, and cultural and scientific visual communicators; (3) to set high standards for visual integrity and communication ethics; and (4) to foster and promote scholarly research.

## INTERNSHIPS

In an effort to provide practical training, the school requires students to work at least one paid internship for a period of 10 weeks during their college careers. Any qualified student may compete for an internship. Many students have several internships before graduation.

In recent years, Ohio University visual communication students have worked on paid internships at newspapers and magazines and in the areas of advertising, photo illustration, and audio-visual production. The internships have been in Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and the District of Columbia. Students have worked on internships overseas in France, Japan, and Norway.

Many Ohio University visual communication students are active members of the Ohio News Photographers Association and other state press photographer groups and are student members of the National Press Photographers Association, the Society for Newspaper Design, and the American Society of Magazine Photographers. Ohio University students have been successful in state and national photography competitions, and have done particularly well in the annual William Randolph Hearst foundation photojournalism competition, which is open to any student taking photojournalism courses in any of the more than 80 participating colleges and universities.

## BACHELOR OF SCIENCE IN JOURNALISM

### Admission Requirements - B.S.J.

The School of Visual Communication admits only the best academically and professionally qualified students who normally rank in the top quarter of their high school classes. Students with lower class rankings are considered if they have outstanding SAT or ACT scores. In addition, students who demonstrate notable talent or experience or have been historically underrepresented in the school will be given special consideration for admission.

### Transfer Students

The school sets high academic and professional standards, and enrollment is limited. All students wishing to transfer into the school must have earned at least 48 quarter hours (32 semester hours) with a grade-point average of 2.5 or higher.

Students who may receive additional consideration include those with demonstrated professional talent or experience, and/or those coming from historically underrepresented groups.

These requirements apply to students transferring from other universities, from other programs within Ohio University, or from one program to another within the College of Communication.

A student must be enrolled one academic year (three consecutive quarters) or the final 48 hours in the school to earn a degree.

## General Requirements - B.S.J.

To meet the accrediting standards of the American Council of Education in Journalism and Mass Communication, three-fourths of the student's program should consist of courses in the liberal arts and sciences and one-fourth in professional courses in journalism, visual communication, and photography.

Visual communication students earning the journalism degree at Ohio University meet this standard by fulfilling general and specialization area requirements. The general requirements provide a liberal arts and sciences core for all students with the following courses:

Political Science (2 qtrs)  
Sociology or Anthropology (2 qtrs)  
Economics (2 qtrs)  
Psychology (1 qtr, except PSY 121)  
History (2 qtrs)  
English Composition (2 qtrs, one must be 305, 307, 308, or 309)  
Statistics (1 qtr, from approved school list)  
Philosophy (2 qtrs, one must be PHIL 120 or 320)  
Foreign Language (3 qtrs basic sequence or 1 qtr advanced)  
OR  
Science (3 qtrs as approved by advisor)  
Comparative Arts/Fine Arts (2 qtrs non-performance)  
OR  
Afro-American and/or Women's Studies (2 qtrs)

## Specialization Area Requirements

To the liberal base, which generally is the focus of the freshman year, visual communication students working toward a journalism degree add courses in desired areas of specialization, meeting the requirement by completing one of two options:

1. A minimum of 36 hours in advanced courses in a single department within the College of Arts and Sciences (usually structured in accordance with the major requirements of the selected department).
2. A minimum of 18 approved hours in one Arts and Sciences department and 18 approved hours in any other series of related courses except journalism, telecommunications, and fine arts photography (picture editing/page design majors should take upper-division art classes—see advisor).

Additional nonjournalism courses are required in some visual communication sequences. No course may be counted for more than one type of requirement. For example, a course used to meet a general requirement may not also be applied to a specialization area or sequence requirement.

To assure the liberal stress of the overall program, the professional content of the B.S.J.-visual communication degree is limited to one-fourth of the 192 hours required for graduation. Credits in all courses in journalism, telecommunications, visual communication, and photography should total at least 45 hours and not more than 55 hours. All professional hours beyond 55 must be compensated for by nonprofessional hours over the required 192-hour total. Nonjournalism courses required in the visual communication core and sequences are not counted as part of the 45 to 55 total professional hours.

## Visual Communication Core Requirements

All visual communication journalism majors complete a basic core of 14 courses totaling 61 to 62 hours. These are:

ART 100 Visual Art .....	3
ART 102 2-Dimen. Design .....	4
ART 151 Intro to Graphic Design .....	4
ART 192 Intro to Photography .....	4
AH 307 History of Photography .....	4
JOUR 221 Graphics .....	5
JOUR 231 News Reporting .....	4
JOUR 235 Pict. Editing .....	3

JOUR 333 News Editing .....	4
JOUR 411 Comm. Law .....	4
JOUR 412 Mass Med. & Soc. ....	3
VICO 120 .....	4
VICO 121 .....	4
VICO 220 .....	4

Plus a choice of one of the following:

JOUR 331 Rptng. Contem. Issues .....	3
JOUR 363 Review & Crit. ....	3
JOUR 441J Mag. Feature Writing .....	4
JOUR 464 Rptng. Pub. Affairs .....	3
JOUR 465 Editorial Page .....	3

The art and art history courses do not count toward the 55 hour limit as professional courses.

## Standards

1. An average grade of B in VICO 120, 121, and 220.
2. Students must earn grades of at least C in JOUR 221, 231, 235, 325, 333, 411, and 412 and all professional courses (VICO, JOUR and PHOTO) to graduate.
3. To qualify to take any journalism course, except JOUR 221, students must first pass an English proficiency examination. Students are urged to take the exam as freshmen. The proficiency test may be taken no more than three times. Passing score for this test is 75. Any student who fails to pass on the first effort will be permitted to retake the exam later. Passing scores on retake examinations are 75 for sophomores and 80 for juniors and seniors.
4. To qualify for admission to JOUR 231 students must achieve at least 25 words per minute on a typing examination administered on the first day of the class.
5. No professional course may be taken more than twice.
6. Students must pass a portfolio review at the end of the JOUR 325 to qualify for advancement to visual communication sequences.

## Visual Communication Sequence Requirements

(Major code #6930)

### Picture Editing/Page Design

JOUR 325 Photojournalism .....	3
JOUR 336 Adv. Pict. Edit. ....	3

VICO 323 Publ. Layout and Design .....	3
VICO 426 Adv. Publ. Layout and Design .....	3
Journalism, photo communication, photo illustration, telecommunications, or visual communication upper-division courses as electives .....	12
total sequence requirements .....	24

### Photo Communication

ART 494 Adv. Publ. Photo. ....	5
ART 387 or 389 Photo. Illus. ....	5
JOUR 325 Photojournalism .....	3
JOUR 326 Advanced Photojournalism .....	3
JOUR 327 Color Photo. ....	3
Journalism, photo communication, photo illustration, telecommunications, or visual communication upper-division courses as electives .....	5
total sequence requirements .....	24

### Photo Illustration

See College of Fine Arts, Visual Communication

### Multi-Media

ART 389 Photo Illus. ....	5
JOUR 325 Photojournalism .....	3
JOUR 326 Advanced Photojournalism .....	3
JOUR 327 Color Photo. ....	3
TCOM 200A Prod. Writing/Planning .....	4
TCOM 200B Audio Prod. ....	4
TCOM 200C Video Prod. ....	4
total sequence requirements .....	26

### Informational Graphics

ART 192 Intro to Photo. ....	4
ART 250 Graphic Design Prin. ....	4
ART 251 Typography .....	4
ART 254 Lettering .....	4
JOUR 336 Advanced Picture Ed. ....	3
VICO 311 Info. Graphics .....	5
VICO 323 Publ. Layout and Design .....	3
VICO 426 Adv. Publ. Layout and Design .....	3
total sequence requirements .....	30

# College of Education

H. Wells Singleton, *Dean*  
Seldon Strother, *Associate Dean*  
Samuel H. Bolden, *Assistant Dean*  
Robert Frey, *Assistant Dean*

## THE COLLEGE

The College of Education is a professional college whose major goal is the preparation of individuals for future careers related to education both in and out of school settings. A wide range of programs is offered for teaching in elementary, middle, and high schools and for other educational positions. The college provides graduate study in a variety of professional education fields.

All undergraduate programs include a broad base of general education, intensive preparation in the subject matter field, and professional emphases which combines theory with actual educational practice. Each program is thus designed to prepare students to enter their future careers with a strong background in liberal arts, educational strategies and techniques, and a thorough understanding of teaching and learning processes.

The College of Education is accredited by the North Central Association of Colleges and Secondary Schools and the National Council for Accreditation of Teacher Education and is approved for teacher preparation by the State Department of Education of Ohio.

## BACHELOR OF SCIENCE IN EDUCATION

The Bachelor of Science in education represents the completion of a program designed to allow the student to attain competence in three areas: (1) the principal academic fields, (2) understanding and skills of teaching, and (3) general/liberal education.

Besides University General Education Requirements each student must complete the certification requirements established for the program he or she is following.

A student who plans to teach in the elementary grades enrolls in the College of Education. The curricula offered by the college meet the requirements of the State Department of Education and qualify a student to obtain a provisional certificate to teach in the elementary grades and kindergarten, depending upon the student's preparation.

A student who plans to teach middle school or high school, or special subjects (e.g., music, art, physical education) enrolls in the College of Education or other colleges within the University. The middle school secondary programs meet the requirements of the State Department of Education and qualify the student to obtain a provisional certificate to teach the subjects indicated on the certificate.

A student who plans to teach in special education classrooms enrolls in the College of Education. The curricula offered by the college meet the requirements of the State Department of Education and qualify a student to obtain a provisional certificate to teach in classrooms for the severe behavioral handicapped, specific learning disabled, multi-handicapped, and developmentally handicapped.

## REVISED PROGRAMS

All undergraduate teacher education programs at Ohio University have been revised to conform to new standards for certification issued by the State Department of Education of Ohio. The new programs and courses are included in this catalog.

These new programs and courses apply to all students entering Ohio University in the 1991-92 and subsequent academic years. Students with questions about their program requirements may contact their advisors and/or Student Services, 124 McCracken Hall, Ohio University, Athens OH 45701-2979.

## SELECTIVE ADMISSION AND RETENTION

The college has a selective admission and retention process that applies to all students who intend to complete the teacher preparation program through Ohio University. Decisions regarding the retention of teacher education students in certification programs will be made through a continuous quarterly evaluation of progress. Progress through coursework, clinical experiences, and field based experiences will be monitored quarterly by a representative faculty committee who will recommend whether a student

should be dismissed from a certification program. Evaluation criteria will be directly related to the specific knowledge, skill, attitude, and value objectives associated with each experience. There are three selection phases in this process, two of which are described below, and the third phase is detailed under Student Teaching.

A complete description of the selective admission and retention policies and procedures is available from Student Services, 124 McCracken Hall.

## Admission to Professional Education

Students must be admitted to professional education before taking any of the following: elementary education courses—any EDEL courses numbered 200 or above; special education courses—any EDSP courses in Block II or above; or secondary education courses—any EDSE courses.

Application for admission to teacher education should be made during the third quarter of the freshman year. The following criteria must be met the quarter before the student applies for admission:

1. Completion of 45 quarter hours of credit with an overall grade-point average of 2.5.
2. A 2.5 grade-point average and no grade below a C is acceptable toward completion of the following courses:
  - a. PSY 101—General Psychology
  - b. Any required remedial work in English composition and mathematics
  - c. Tier I composition and mathematics, and INCO 101/103
3. Satisfactory performance on the Speech and Hearing Proficiency Examination. This examination is offered through the Speech and Hearing Clinic, Lindley Hall, on the Athens campus or by approved individuals at the branch campuses.
4. Satisfactory performance on the Preprofessional Skills Tests (PPST). Must achieve scores of 172 or above in each area. Any score less than 172 is unacceptable.
5. Submission of a statement confirming that the student's record is clear of any felony convictions, obtained from Student Services, 124 McCracken Hall.
6. Submission of results of the tuberculosis skin test (administered by Hudson Health Center).
7. Submission of two reference forms from either Ohio University instructors or instructors from other colleges or universities.

## Admission to Advanced Standing in Professional Education

Students must be admitted to advanced standing prior to taking any of the following courses: elementary education courses—any EDEL courses numbered 300 or above; special education courses—any EDSP courses in Block III or above; or secondary education courses—any EDSE courses numbered 300 or above. Methods courses can be taken only twice.

Application for advanced standing in professional education should be made at the end of the third quarter of the sophomore year. The following criteria must be met the quarter before the student applies:

1. General requirements
  - a. Completion of 90 quarter hours of credit with an overall g.p.a. of 2.5.
  - b. Satisfactory reports from:
    - (1) Hudson Health Center, T.B. test
    - (2) Student Judiciaries
    - (3) Faculty Advisor
  - c. A 2.5 grade-point average and no grade below a C in the following courses:
    - (1) Tier I freshman composition requirement
    - (2) INCO 103—Public Speaking. (For hearing and speech therapy majors only, HSS 107—Voice and Articulation—is the required course in this category; and INCO 101 and 103 are optional.)

lation—is the required course in this category; and INCO 101 and 103 are optional.)

- (3) Tier I quantitative skills requirement
- d. Apply for advanced field experience—urban
- e. Apply for student teaching
2. Specific requirements for *elementary* education
  - a. Completion of the following courses with a 2.5 g.p.a. and a minimum grade of C in each:
    - (1) EDCI 275 or PSY 275
    - (2) EDEL 200 (or PSY 273 or HECF 160)
    - (3) EDEL 200L
    - (4) EDSP 271
    - (5) EDSP 160
  - b. A satisfactory recommendation from the faculty in elementary education is necessary for the student's continuation in the elementary education program.
3. Specific requirements for *special* education
  - a. Completion of all courses in Blocks I and II with a 2.5 g.p.a.
  - b. Each course in blocks I and II must be completed with a grade of C or better.
  - c. A satisfactory recommendation from the faculty members coordinating Blocks I and II based upon review by all the faculty teaching in each block is necessary for the student's continuation in the special education program.
4. Specific requirements for *secondary* and *special fields* (K-12) education.
  - a. Completion of the following courses with a g.p.a. of 2.5 and a minimum grade of C in each:
    - (1) EDSE 250
    - (2) EDSE 250L
    - (3) EDSE 270
    - (4) EDSE 270L
    - (5) EDCI 275 or PSY 275
  - b. A 2.5 accumulative g.p.a. in each teaching field for which certification is being sought.
  - c. A satisfactory recommendation from the faculty in secondary education is necessary for the student's continuation in the secondary education program.
5. Specific requirements for *hearing and speech therapy*
  - a. Completion of the following courses with a g.p.a. of 2.5 and a minimum grade of C in each:
    - (1) EDCI 275 or PSY 275
    - (2) EDEL 200 and 200L
    - (3) EDSP 270
    - (4) EDSP 271 or PSY 376
  - b. A 2.5 accumulative g.p.a. in all hearing and speech science courses completed.
  - c. A satisfactory recommendation from:
    - (1) faculty member who taught the student in HSS 240, Professional Orientation
    - (2) faculty member who taught the student in EDSP 270, Classroom Management of Children.

## SCHOOL OF APPLIED BEHAVIORAL SCIENCES AND EDUCATIONAL LEADERSHIP

The School of Applied Behavioral Sciences and Educational Leadership offers only graduate programs. However, some undergraduate courses are available in career counseling and human relations. Students interested in graduate programs should contact Student Services, 124 McCracken Hall.

## SCHOOL OF CURRICULUM AND INSTRUCTION

The School of Curriculum and Instruction comprises four major program areas: elementary education, middle/junior high school education, secondary education, and special education. Thirty-four certifiable programs are offered in these fields. In addition, there are validations and endorsements in selected areas. The school provides the opportunity for students admitted to teacher education to



pursue undergraduate courses leading to teacher certification in the state of Ohio. Listed below are program descriptions and course requirements for each of the certification and validation patterns offered.

A junior or senior who has a 3.0 accumulative grade-point average and is able to schedule 15 to 18 hours of independent study in the school may be eligible for school honors. Honors work extends beyond the required teacher-education course sequences.

## ELEMENTARY EDUCATION PROGRAM

To receive a B.S.Ed. degree and certification in elementary education, students must complete the total program in elementary education. Upon completion of the program and after passing the National Teacher's Exam, students are eligible for a four-year provisional teaching certificate for teaching in grades one to eight. Kindergarten certification also may be obtained by completing the necessary kindergarten requirements as specified below:

### Required General Education Courses

PSY 101 Gen. Psych. ....	5
English ....	21-23

Freshman and junior English composition courses taken to satisfy the University English composition requirement (See English Composition Requirement in the Graduation Requirements section of this catalog) may be used toward completion of these hours.

Required: INCO 103 Pub. Speaking ....	4
LING 270 Nature of Lang. ....	5
EDEL 321 Children's Lit. ....	3
EDEL 321L Field/Clinical Exp. ....	1
ART 360 Art for Elementary Teachers ....	6
MUS 160 Music Fundamentals ....	3
MUS 161 Mus for Classrm Teachers ....	3
Natural Science ....	12

All students must complete at least 12 quarter hours of science as follows (one in each area):

Biological (most BOT, MICR, ZOOL)  
Physical (CHEM, PSC 101 or 105, or PHYS)  
Earth (GEOL, GEOG 101, ASTR)

All courses taken to complete this requirement must contain a laboratory component.

Mathematics* ....	10 hrs
MATH 120 Elem. Topics in Math ....	4
MATH 121 Elem. Topics in Math ....	3
MATH 122 Elem. Topics in Math ....	3

\*These courses are recommended; however, any mathematics courses numbered above 120 and equaling ten quarter hours are acceptable (except MATH 151).

Social Studies ....	27
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Each student is required to complete at least 27 quarter hours and a minimum of seven courses in social studies. Social studies is defined as any history, political science, economics, sociology, anthropology, social welfare, geography, or economic education course.

Specific requirements are the completion of at least one course in American history or American government. GEOG 121 Human Geog. and EDCE 410 Human Relations.

Physical Education	
HLTH 202 Health Sci & Lifestyle ....	4
HPES 270 Tchng. Phys. Ed. ....	3

No more than six hours of HSC activity courses may be counted toward the degree and none count in general education.

Students must also complete Ohio University's General Education Program (see General Education Requirement section of this catalog) and are urged to consult with their advisors to plan to meet both sets of requirements.

### Professional Sequence

The following professional courses are required of all elementary education majors. To be eligible to enroll in

these courses students should note the prerequisites in the Courses of Instruction section of this catalog.

EDEL 200 Studies of Children .....	4
EDEL 200L Field/Clinical Exp. ....	1
EDSP 160 Field Exp. Spec. Educ. ....	1
EDSP 271 Intro Excep. Children .....	3
EDCI 275 Lrng. Process Classrm .....	5
OR	
PSY 275 Educational Psych. ....	4
EDEL 310 Teach Lang. Arts Elem. Sch. ....	3
EDEL 310L Field/Clinical Experience .....	2
EDEL 311 Teach Read Elem. Sch. ....	4
EDEL 311L Field/Clinical Experience .....	1
EDEL 330 Teach Math in Elem. Sch. K-3 .....	2
EDEL 330L Field/Clinical Experience .....	1
EDEL 331 Teach Math in Elem. Sch. 4-8 .....	2
EDEL 331L Field/Clinical Experience .....	1
EDEL 340 Teach Science Elem. Sch. ....	4
EDEL 340L Field/Clinical Experience .....	1
EDEL 350 Teach Soc. Studies Elem. Sch. ....	3
EDEL 350L Field/Clinical Experience .....	1
EDEL 372 Managing Elem. Classroom .....	2
EDEL 460 Child and the Curriculum .....	4
EDM 332 Microcomputer Applications in Ed. ....	4
EDM 480 Intro to Educ. Media .....	4
EDCI 401 Advanced Field Exp.—Urban .....	2

### Kindergarten-Primary Sequence

Students seeking kindergarten-primary certification should complete the regular elementary education program plus EDEL 306 (6 hrs), Kindergarten Theory and Methods, and EDPL 461 (7 hrs), Student Teaching in Elementary Schools. Students seeking this certification will complete one quarter of student teaching in an elementary situation followed by an additional part-time student teaching assignment in a kindergarten class.

### Thirty Hour Concentration

A thirty hour concentration is required in the program for prekindergarten, kindergarten-primary, and elementary. This concentration must be in the area of one of the following: humanities, mathematics, natural sciences, or social sciences. An area of concentration may contain ten quarter hours that are presently used to meet the General Education Requirements in one of the following areas: humanities, mathematics, natural sciences, or social sciences. An area of concentration must contain ten quarter hours at the 300 level or above. Courses for an area of concentration must be selected from a pre-approved listing of courses that are acceptable as possible concentration courses.

NOTE: Special education cannot be used as an area of concentration.

### Professional Laboratory Experience

EDPL 461 and 462 Stu. Tchng. in Elem. School .....	13
EDPL 465 Stu. Tchng. Seminar .....	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. Additional student teaching is required of students seeking kindergarten certification. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be taken. For example, anyone doing student teaching during any of the three quarters of the school year 1992-93 should apply by December 1, 1991. For further information contact the Field Experiences Office, 124 McCracken Hall.

### EARLY CHILDHOOD/PRIMARY

This program prepares students to meet state of Ohio teacher certification requirements as elementary and pre-school teachers.

The current program in preschool teaching is part of the School of Home Economics and the current program in elementary education is part of the School of Curriculum and Instruction. This program provides for each student to choose the school and college in which he or she wishes to enroll; therefore, a student can earn either a Bachelor of Science in home economics or a Bachelor of Science in education. In either case the student follows the same program and earns the same certificate upon receiving passing scores on the National Teacher's Exam.

Students are advised that the early childhood/primary program is a *dual concentration* and is likely to require at least one additional quarter beyond the 12 quarters ordinarily needed for a bachelor's degree. Students in the program should schedule carefully and work closely with their advisors.

## Required General Education Courses

Students also must complete Ohio University's General Education Program (see General Education Requirement section of this catalog) and are urged to consult with their advisors to plan to meet both sets of General Education Requirements.

PSY 101 General Psych.	5
ART 360 Art for Elem. Teachers	6
English	21-23
Freshman composition requirement	5
Junior composition requirement	4
INCO 103 Pub. Spkg.	4
LING 270 Nature of Language	5
EDEL 321 Children's Lit.	3
EDEL 321L Field/Clinical Experience	1
Mathematics*	10
MATH 120 Elem. Topics in Math	4
MATH 121 Elem. Topics in Math	3
MATH 122 Elem. Topics in Math	3
*These courses are recommended; however, any mathematics courses numbered above 120 and equaling ten quarter hours are acceptable (except MATH 151).	
MUS 160 Music Fundamentals	3
MUS 161 Music for Classroom Teachers	3
OR	
MUS 262 Music in Early Childhood	3
Natural Science	14
BOT/ZOOL 101 Prin. of Biol.	5
ZOOL 103 Hum. Biol.	5
One physical science with laboratory component	4
Social Sciences	27
SOC 101 Intro to Sociology	5
ECON 103 Prin. of Econ.	4
OR	
ECED 346 Econ. in Curriculum	4
GEOG 121 Elements of Human Geog.	4
U.S. history or political science	4
HECF 360 Human Sexuality	3
SOC 201 Social Problems	4
OR	
SOC 223 American Society	4
HECF 371 Family Development	3
Physical Education	7
HPES 270 Tchng. of Phys. Ed.	3
HLTH 202 Health Sci & Lifestyle	4
OR	
HLTH 227 First Aid	3

## Major Requirements

HECF 160 Intro to Child Development	4
OR	
EDEL 200 Studies of Children	4
OR	
PSY 273 Child & Adol. Psych.	4
EDSP 271 Intro Except. Children	3

EDSP 160 Field Exp. Spec. Education	1
EDCI 275 Lrng. Process in the Classroom	5
OR	
PSY 275 Educational Psych.	4
EDEL 200L Field/Clinical Exp.	1
EDEL 306 Kindergarten Educ.	6
EDEL 310 Teach. Lang. Arts Elem. Sch.	3
EDEL 310L Field/Clinical Experience	2
EDEL 311 Teaching Reading Elem. Sch.	4
EDEL 311L Field/Clinical Experience	1
EDEL 330 Teach Math in Elem. Sch. K-3	2
EDEL 330L Field/Clinical Experience	1
EDEL 340 Teach Science Elem. Sch.	4
EDEL 340L Field/Clinical Experience	1
EDEL 350 Teach Soc. Studies Elem. Sch.	3
EDEL 350L Field/Clinical Experience	1
EDEL 372 Managing Elem. Classroom	2
EDEL 460 Child and the Curriculum	4
EDM 332 Microcomputer Applications in Ed.	4
EDM 480 Intro to Educ. Media	4
EDCI 401 Advanced Field Experience-Urban	2
EDCE 410 Human Relations	3
HECF 361 Prin. of Preschool Guidance	4
HECF 363 Creative Exper. with Preschool Child	4
HECF 364 Premath & Sci-Young Children	4
HECF 462 Readings in Child Development A, B, C	
(Choose 2)	4
HECF 463 Preschool Administration	5
HECF 465 Parent Education	4
HEFN 128 Intro to Nutrition	4
Area of Concentration	30

## Professional Laboratory Experience

EDPL 461 and 462 Stu. Tchng. in Elem. School	13
EDPL 465 Stu. Tchng. Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. For example, anyone doing student teaching during any of the three quarters of the school year 1992-93 should apply by December 1, 1991. For further information contact the Field Experiences Office.

HECF 464 Early Childhood Practicum	6
HECF 400 Sem	3

Students must sign up with the director of the Child Development Center at least one year in advance.

## Procedures for Transferring from One Type of Certificate to Another

### Elementary to High School

The holder of a standard elementary teacher's certificate may obtain a high school teacher's certificate by completing the teaching field requirements and a methods course for teaching at the secondary level.

### High School or Special to Elementary

The holder of a provisional, professional, or permanent high school or special teacher's certificate may obtain a certificate valid for elementary teaching upon submitted evidence of the satisfactory completion of the following coursework in elementary education:

- Child Psychology — EDEL 200 OR PSY 273 OR HECF 160
- Methods of Teaching Reading — EDEL 310, 310L, 311, 311L
- Methods of Teaching Mathematics — EDEL 330, 330L, 331, 331L
- Methods of Teaching Science — EDEL 340, 340L
- Methods of Teaching Social Studies — EDEL 350, 350L
- ART 360, Visual Arts
- HLTH 202 and HPES 270
- MUS 160 and 161
- Children's Lit, EDEL 321, 321L; INCO 103 and LING 270

- j. MATH 120, 121, 122
- k. Science, Physical, Biological, and Earth
- l. U.S. History or political science (Minimum of 20 hours of social studies from history, political science, geography, sociology, economics, anthropology, social welfare, or economic education)

## MIDDLE SCHOOL EDUCATION PROGRAMS

To receive a B.S.Ed. degree in middle school education, students must complete one of the following programs and achieve a passing score on the National Teacher's Examination prior to certification. Each program curriculum shall include coursework well distributed over two academic concentrations. For example, academic concentration combinations can come from language arts and reading, mathematics, science, and social studies, or other combinations such as mathematics/science or language arts/social studies. Upon completing the program and achieving a passing score on the appropriate fields of the National Teacher's Examination, students are eligible for a four-year provisional teaching certificate for grades 4-9.

### Required General Education Courses

All students in middle school education must complete 45 hours of general education coursework to be eligible for graduation with a B.S.Ed. degree and teacher certification.

**NOTE:** Students also must complete Ohio University General Education Requirements (see General Education Requirement in the Graduation Requirements section of this catalog) and should consult with their advisor to plan a course of study that will meet both sets of requirements.

The breakdown of these general education course requirements is as follows:

#### Science and Mathematics

Each student is required to complete at least two courses, one in science and one in mathematics. Appropriate science courses are biological science with lab or physical science with lab. MATH 120, 121, and 122 are recommended; however, any mathematics course numbered above 120 (except MATH 151) is acceptable.

#### Comparative Arts and/or Philosophy

Each student is required to complete at least two courses in this area. The two courses need not be in the same field. Possibilities include any courses in the Dept. of Philosophy and the School of Comparative Arts; HUM 107, 108, 109, 307, 308, and 309; theater history courses; art history courses; School of Art courses **except** for ART 360, 461, 462; School of Music courses **except** for music education courses, music therapy courses, and the one- or two-hour participation courses.

**NOTE:** Science majors should take PHIL 216, Philosophy of Science, 3 hrs.

#### Social Sciences

Each student is required to complete at least two courses in social science. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses. Other possibilities include any course in anthropology, economics, economic education, geography, history, political science, psychology (except PSY 121, 226, 275, 314, and 321), social work, and sociology.

#### English and/or Foreign Language

Each student is required to complete at least two courses in English and/or a foreign language. The two courses need not be in the same field. INCO 103, which is required in this area, is counted as one of the two courses needed. Other possibilities in this area include all English courses **except** ENG 450A and 450B; any linguistics courses; any foreign language courses **except** ML 410 and 445; HUM 107, 108,

109, 307, 308, and 309 (these humanities courses may **not** count toward General Education Requirements in both the English and/or foreign language field **and** the comparative arts and/or philosophy field).

Freshman and junior English composition courses taken to satisfy the University composition requirement (see General Education Requirement section of this catalog) also may be used toward completion of these hours.

If the total coursework from each of the above fields does not add up to 45 hours, then a student must elect sufficient hours in one or a combination of the above areas to bring the total hours in general education courses to 45 hours.

If a middle school education student's major and second teaching field is the same as one of the above areas, then 12-18 hours of the major and second teaching field may meet requirements for the corresponding general education field, as well as in the academic major and second teaching field. For example, if the student's major is language arts and reading, then 10 hours of English may count toward the 45 hour total of General Education Requirements and also toward the English and/or foreign language field above. The same concept applies to mathematics, science, and social studies.

No more than three hours of HPES activity courses may be counted toward the degree except for majors or minors in physical education, and none may count toward general education.

**REMINDER:** All students pursuing teacher education programs at Ohio University are subject to the Selective Admission and Retention Program in teacher education. Criteria and procedures are available in Student Services, McCracken Hall.

#### Field Experience

All field experiences must be undertaken in a middle school setting. The field experience activities include observation, participation, urban field, and student teaching.

## Middle School Certification

### Professional Requirements: 51

All professional courses are taught with a middle school focus.

EDCI 275 Lrng. Process in the Classroom .....	5
OR	
PSY 275 Educational Psy .....	4
EDMS 351* Middle Sch. Instr. Pro. of Curr. ....	5
EDMS 250* Analysis Teacher Char. & Tch. Tasks .....	4
EDMS 250L* Field Experience .....	2
EDMS 270* Stud. of Lrn: Dev/Except .....	3
EDMS 270L* Stud. of Lrn: Field Exp. ....	1
Two methods courses, one in each major field .....	6-8

(If methods professor does not require and certify 30 clock hours of field, laboratory, and clinical experience, students also must register for EDPL 360, Field Experience in Middle School, to obtain the required field contact hours.)

EDM 480 Intro to Educ. Media .....	4
EDCI 401 Adv. Field Exp. Urban .....	2
EDSE 420 Tch. Read. in Content Area .....	4
EDSE 420L Field Exp. ....	1
OR	
EDEL 311 Teach/Read in Elem. School .....	3
EDEL 311L Teach/Read Elem. School Lab/Field .....	1
EDMS 412* Middle School Education .....	5
EDCI 480 Teacher, School, & Soc. ....	3
EDM 332 Micro. Appl. in Education .....	4
EDCE 410 Human Relations .....	3
(recommended as an elective)	

\*Subject to change in title and number. Students are urged to preregister for their professional courses so that proper field experience placements in their major area can be identified ahead of time. Students seeking to add field experience courses after the quarter begins may be required to wait until a field placement is open.

## Professional Laboratory Experience

EDPL 463, 464 Student Teach. in Middle School .....	13
(EDPL 461 may be substituted for EDPL 464 where appropriate.)	
EDPL 465 Student Teaching Seminar .....	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. Students must request placement in an approved middle school. For example, anyone doing student teaching during any of the three quarters of the 1992-93 school year should apply by December 1, 1991. For further information, contact the Field Experiences Office.

## Major Requirements

### Option A: Language Arts and Reading/ Social Studies

#### Language Arts and Reading Emphasis (50-51 hrs.)

EDEL 411 Diag. & Treat. of Read. Dis. ....	4
EDEL 412 Reading Lab Pract. ....	4
ENG 200 Introduction to Lit. ....	4
ENG 201 Interp. of Fiction ....	4
OR	
ENG 202 Interp. of Poetry ....	4
ENG 203 Interp. of Drama ....	4
ENG 315 American Literature ....	3
ENG 316 Eng. & Continental Lit. ....	3
ENG 307 Structure of Amer. Eng. ....	5
ENG 308J Advanced Composition ....	4
ENG 321 Amer. Lit. to Civil War ....	5
OR	
ENG 322 Amer. Lit. Since Civil War ....	5
ENG 331 20th Century British and American Lit. ....	5
LING 270 Nature of Language ....	5
EDEL 321 Children's Lit. ....	4
EDEL 321L Field/Clinical ....	1
OR	
ENG 345 Read. in Children's Lit. ....	4

**NOTE:** Language arts majors also take EDSE 420 or 420L, Reading in the Content Areas, to get reading validation.

#### Social Studies (33 hrs.)

Select two of the following:

HIST 101 Western Civ. ....	4
HIST 102 Western Civ. ....	4
HIST 103 Western Civ. ....	4
GEOG 101 Elem. of Phys. Geog. ....	5
HIST 131 Intro to Third World ....	4
HIST 317B Ohio Hist. Since 1851 ....	4
POLS 101 Amer. Nat. Govt. ....	4

Select two of the following:

HIST 211 Am. Hist. to 1828 ....	4
HIST 212 Am. Hist. 1828-1900 ....	4
HIST 213 Am. Hist. Since 1900 ....	4

#### Methods Courses

All students must select one methods course in language arts and one methods course in social studies. Students also must take one elementary and one secondary course.

EDEL 310 Tchng Language Arts Elementary Sch. ....	3
EDEL 310 Field/Clinical ....	2
OR	
ENG 450A Tch. Lang. & Comp (fall only) ....	3
EDPL 360 Field/Clinical ....	2
ENG 450B Tch. Literature ....	3
EDEL 350 Tch. Soc. St. Elem. ....	3
EDEL 350L Field/Clinical ....	1
OR	
EDSE 479 Tch. Soc. Sci. Mid. and Sr. H.S. ....	3

## Major Requirements

### Option B: Social Studies/Language Arts

#### Social Studies Emphasis (45 hrs.)

Select two of the following:

HIST 101 West. Civ. ....	4
HIST 102 West. Civ. ....	4
HIST 103 West. Civ. ....	4

ECON 103 Prin. of Micro. ....	4
GEOG 101 Elem. of Phys. Geog. ....	5
GEOG 121 Cultural Geog. ....	4
HIST 131 Intro to Third World ....	4
HIST 317B Ohio Hist. Since 1851 ....	4
POLS 101 Amer. Nat. Govt. ....	4
POLS 103 U.S. in World Affairs ....	4

Select two of the following:

HIST 211 Am. Hist. to 1828 ....	4
HIST 212 Am. Hist. 1828-1900 ....	4
HIST 213 Am. Hist. Since 1900 ....	4

#### Language Arts (40-41 hrs.)

EDEL 321 & 321L Children's Lit. ....	4
EDEL 411 Diag./Treat. of Reading Disabil. ....	4
EDEL 412 Reading Lab Pract. ....	4
OR	
EDSE 420, 420L Reading in Content Area ....	5
ENG 200 Intro to Literature ....	4
ENG 201 Interp. of Fiction ....	4
OR	
ENG 202 Interp. of Poetry ....	4
OR	
ENG 203 Interp. of Drama ....	4
ENG 315 American Literature ....	3
ENG 316 Eng. & Continental Lit. ....	3
ENG 307 Structure of Amer. Eng. ....	5
ENG 308J Advanced Composition ....	4
LING 270 Nature of Language ....	5

#### Methods Courses

All students must select one methods course in language arts and one methods course in social studies. Students also must take one elementary and one secondary methods course.

EDEL 310 Teaching Language Arts Elem. Sch. ....	3
EDEL 310L Field/Clinical ....	2
OR	
ENG 450A Tch. Lang. & Comp. (fall only) ....	3
EDEL 350 Tch. Soc. St. Elem. ....	3
EDEL 350L Field/Clinical ....	1
OR	
EDSE 479 Tch. Soc. Sci. Mid. and Sr. H.S. ....	3
EDPL 360 Field/Clinical ....	2
ENG 450B Tch. Literature ....	3

## Major Requirements

### Option C: Mathematics/Science

#### Mathematics Emphasis (43 hrs.)

CS 230 Computer Programming ....	5
MATH 263 A,B,C,D Analytic Geom. and Calc. ....	16
MATH 250B Finite Math. ....	4
MATH 211 Linear Algebra ....	4
MATH 330A and 330B Found. of Geom. ....	6
MATH electives, 200 level or above ....	8

#### Science (32 hrs.)

BOT 110 Intro to Botany ....	6
OR	
ZOOL 170 ....	6
CHEM 121 Intro to Chem. ....	4
GEOL 101 Intro to Geol. ....	5
OR	
GEOG 101 Elem. of Phys. Geog. ....	5
GEOG 201 Environ. Geog. ....	4
PHYS 201 Intro to Physics ....	4
PSC 100D The Universe ....	4
ZOOL 171 Intro to Zoology ....	5

#### Methods Courses

Select one methods course in mathematics and one methods course in science. Students also must take one elementary and one secondary methods course.

BOT 368 Tchng. Biology ....	4
EDEL 340, 340L Tchng. Sci. Elem. ....	5
EDEL 331, 331L Tchng. Math Elem. Sch. ....	3
OR	
MATH 320 Teach. Math Sec. Sch. ....	4
EDSE 472, 472L Teaching Earth Science and Field/Clin. ....	4
EDSE 478, 478L Tchng. Phys. Sci. and Field/Clin. ....	4

## Major Requirements

### Option D: Science/Mathematics

#### Science Emphasis (46 hrs.)

BOT 110 Intro to Botany .....	6
CHEM 121, 122 Intro to Chem. ....	8
GEOG 201 Environmental Geog. ....	4
GEOL 101 Intro to Geology .....	5
GEOL 221 Earth and Life Hist. ....	4
GEOL 310 Rocks and Minerals .....	6
PHIL 216 Philosophy of Science .....	3
PHYS 201 Intro to Physics .....	4
PSC 100D The Universe .....	4
ZOOL 171 Intro to Zool .....	5
(See General Education Requirements, Philosophy)	

#### Mathematics (31 hrs.)

CS 230 Computer Programming .....	5
MATH 163A Intro to Calculus .....	4
MATH 163B Intro to Calculus .....	3
OR	
MATH 263A Analytic Geom. & Calc. ....	4
MATH 211 Linear Algebra .....	4
MATH 250B Finite Math .....	4
MATH 330A Found. of Geometry .....	3
<i>Math electives — select 3 courses from the following:</i>	
MATH 300 History of Mathematics .....	4
MATH 306 Foundations of Mathematics .....	4
MATH 307 Introduction to Number Theory .....	4
MATH 314 Elementary Abstract Algebra .....	4
MATH 330B Foundations of Geometry .....	3

#### Methods Courses

Select one methods course in science and one methods course in mathematics. Students also must take one elementary and one secondary methods course.

BOT 368 Tchng. Biology .....	4
EDEL 340, 340L Tchng. Sci. Elem. ....	5
EDEL 331 Teach. Math Elem. Sch. ....	2
EDEL 331L Field/Clinical .....	1
OR	
MATH 320 Teach. Math Sec. Sch. ....	4
EDSE 472, 472L Teaching Earth Science .....	4
EDSE 478, 478L Tchng. Phys. Sci. ....	4

## SECONDARY EDUCATION PROGRAMS

### Professional Requirements (35-38)

EDCI 275 Learning Processes in the Classroom .....	5
OR	
PSY 275 Educational Psych. ....	4
EDCI 401 Advanced Field Experience-Urban .....	2
EDCI 480 Teacher, School, and Society .....	3
EDM 480A Intro to Educational Media .....	2
EDSE 250 Analysis of Teacher Characteristics and Teaching Tasks .....	4
EDSE 250L Field Experience .....	2
EDSE 270 Studies of the Learner: Devel. & Exceptionalities .....	3
EDSE 270L Field Experience .....	1
EDSE 351 Instruc. Proc. & Curriculum .....	5
Methods in Major Field .....	3-6
(If a methods professor does not require and certify 30 clock hours of field, laboratory, and clinical experience, students must also register for EDPL 360, Field Experience in Elementary or Secondary Schools, to obtain the required field contact hours.)	
EDSE 420 Teaching Reading in the Content Areas .....	4
EDSE 420L Field Experience .....	1

EDM 332, Microcomputer Applications in Education, is highly recommended as an elective.

Students are urged strongly to preregister for their professional courses so that proper field experience placements in their major area can be identified ahead of time.

Students seeking to add L (field experience) courses after a quarter begins may be required to wait until a field placement is open.

### Professional Laboratory Experience

EDPL 463 and 464 Stu. Tchng. in Second. Schools (EDPL 461 may be substituted for EDPL 464 where appropriate) .....	13
EDPL 465 Stu. Tchng. Seminar .....	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. For example, anyone doing student teaching during any of the three quarters of the school year 1992-93 should apply by December 1, 1991. For further information contact the Field Experiences Office.

### Honors Tutorial Program in Secondary Education

Students admitted to the Honors Tutorial College in an academic major may become certified in secondary education by combining two sets of tutorial experiences — one in the academic area and one in secondary education. Students completing both tutorial programs, in addition to other certification requirements, receive secondary teaching certification and a bachelor's degree from the Honors Tutorial College. For further information, contact: Dr. Edward Stevens, Coordinator, Honors Tutorial Program in Secondary Education.

### Required General Education Courses

All students in secondary academic or special fields in teacher education (except home economics education) must complete 45 hours of general education courses in order to be eligible for graduation with a B.S.Ed. degree or teacher certification or both.

Students must also complete Ohio University's General Education Program (see General Education Requirement in the Graduation Requirements section of this catalog) and are urged to consult with their advisors to plan to meet both sets of General Education Requirements.

The breakdown of these general education course requirements is as follows:

#### Science and Mathematics

Each student is required to complete at least one course in science and one course in mathematics. Appropriate science courses are: astronomy, chemistry, physics, botany, zoological and biomedical sciences, physical science, geological sciences, and PSY 226, 312, and 314. Any course in the Mathematics Department except 101 or 320, is acceptable for the mathematics requirement. Also, PSY 121 counts toward the mathematics requirement. Computer science courses do not satisfy this requirement.

#### Comparative Arts and/or Philosophy

Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any courses in the Department of Philosophy; School of Comparative Arts: HUM 107, 108, 109, 307, 308, and 309; theater history courses: Art History; Art except for ART 360, 461, 462; School of Music courses except for music education courses, music therapy courses, and the one- or two-hour participation courses.

#### Social Studies

Each student is required to complete at least two courses in social science. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses. Other possibilities include any course in anthropology, economics, economic education, history, political science, sociology, social work, geography, and psychology, EXCEPT PSY 275, 121, 226, 312, and 314.

## English and/or Foreign Language

Each student is required to complete at least two courses in English and/or foreign language. Freshman and junior English composition courses taken to satisfy the University English composition requirement (See English Composition Requirement in the Graduation Requirements section of this catalog.) may be used toward completion of these hours. The two courses need not be in the same field. INCO 103 is a specific requirement in this area and is counted as one of the two courses needed. Possibilities in this area include all English courses EXCEPT ENG 450A and 450B; any linguistics courses; any foreign language courses EXCEPT ML 410 and 445; HUM 107, 108, 109, 307, 308, and 309 (these humanities courses may NOT count toward the general education course requirements in both the English and/or foreign language field AND the comparative arts and/or philosophy field):

If two courses in each of the above fields do not add up to a total of 45 hours, then a student must elect sufficient hours in one or a combination of the above areas to bring the total hours in general education courses to 45 hours.

If a student's major OR second teaching field is the same as one of the above areas, then ten hours of the major or minor may be counted toward the corresponding general education field as well as the major or minor. For example, if the student's major is English, ten hours of English may count toward the 45-hour total of general education courses and toward Field 4, above, which is English and/or Foreign Language.

No more than six hours of HPES activity courses may be counted toward the degree except for majors or minors in physical education and recreation, and none may count in general education.

## Program Requirements

### Art Education

Regardless of the college of the University from which a student graduates, to achieve certification through Ohio University to teach art, the following program must be completed and passing scores earned on the National Teacher's Exam. This program leads to a four-year provisional special field certificate in art allowing the holder to teach art in grades K-12 inclusive.

To become an art education major, a student must submit a portfolio of studio work for review at the end of the sophomore year. Portfolio reviews are held the first week of May. The faculty of the art education area will review portfolios and will accept as majors those students whose portfolios are deemed satisfactory.

#### Methods Courses:

ART 461 Art Exper. in Elem. School .....	3
ART 462 Tchng. in the Second. School .....	3

#### Major Requirements: 100

- A. Complete at least 76 quarter hours of studio courses including at least one course from each of the following three areas:
1. Two-dimensional art: Possibilities include courses in two-dimensional design, drawing, fibers, graphic design painting, photography, and printmaking.
  2. Three-dimensional art: Possibilities include courses in three-dimensional design, ceramics, fibers, glass, and sculpture.
  3. Graphic communications: ART 151, 251, or 254

**NOTE:** Although a course may be counted in more than one area, a single course may not be used to fulfill more than one requirement. Art education courses (ART 360, 461, 462) do not count toward the art major requirements above.

To achieve proficiency in studio work, the art education major must complete a concentration of 36 quarter hours in two studio areas, including a sequence of at least five courses at the 200 level or above in one of the two areas.

- B. Complete at least 24 quarter hours of art history and/or comparative arts. Possibilities include any courses in the art

history area or in comparative arts except CA 270, 271, 272, 321, 322, 323, 470, 471, 472, 477.

## Biological Sciences

A student may earn either a B.S.Ed. in the College of Education or an A.B. or B.S. in botany or zoology in the College of Arts and Sciences and meet the teacher certification requirements. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach biology as the major field, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach biology in grades 7-12, inclusive.

Students are strongly urged to complete a second teaching field preferably in another science or in mathematics. Program sheets detailing specific course requirements in these minors are available from Student Services, McCracken Hall.

#### Methods Courses:

BOT 360 Field Exp. ....	2
BOT 368 Tchng. of Biol. ....	4

#### Major Requirements: 89-96

BOT 111 Intro to Botany .....	6
BOT 424 Plant Physiology .....	6
OR	
ZOOL 460 Animal Physiology .....	4
OR	
ZOOL 448 Cell Physiology .....	4
OR	
ZOOL 345 Human Physiology .....	4
BOT 331 Plant Genetics .....	5
OR	
ZOOL 325 General Genetics .....	5
BOT 425 Plant Ecology .....	5
OR	
ZOOL 275 Animal Ecology .....	4
BOT 431 Cell Biology .....	5
OR	
ZOOL 463 Cell Chemistry .....	4
BOT 475 Plant Speciation & Evolution .....	3
OR	
ZOOL 479 Evolution .....	4
CHEM 151, 152, 153 Intro to Chem .....	15
CHEM 301, 302 Organic Chem .....	6
GEOL 211 Oceanography .....	4
MATH 163A and 163B Intro to Calculus .....	7
OR	
MATH 263A and 263B Intro to Calc .....	8
MICR 211 & 212 Environmental Micro & Lab .....	6
OR	
MICR 411 General Micro .....	6
PHIL 216 Phil Sci Survey .....	3
PHYS 201, 202 Intro to Physics .....	8
ZOOL 170 (or BOT 110) Intro to .....	5
ZOOL 171 Intro to Zool .....	5

Choose 4 hrs. of electives from the following:

BOT 247 Veg of North America .....	4
BOT 307 Morphology of Algae & Bryophytes .....	6
BOT 308 Morphology of Vascular Plants .....	6
BOT 309 Plant Systematics & Ohio Flora .....	5
BOT 310 Biology of Fungi .....	5
BOT 311 Biol and Human Affairs .....	4
BOT 312 Plant Anatomy .....	5
ZOOL 301 Human Anatomy .....	6
ZOOL 303 Comp Vert Anatomy .....	6
ZOOL 390H Biol and Future of Man .....	5
ZOOL 430 Invert Zoology .....	6
ZOOL 435 Entomology .....	6
ZOOL 471 Ornithology .....	5
ZOOL 474 Mammalogy .....	6



**Bookkeeping — Basic Business**

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach bookkeeping-basic business, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach bookkeeping-basic business and sales-communication in grades 7-12, inclusive.

**Methods Course:**

EDSE 470 Tchng. of Bookkeeping-Basic Bus. .... 3

**Major Requirements: 68-72**

ACCT 201 and 202 Financial and Managerial ..... 8  
 BUSL 255, 356 Law & Society, Law of the Mgt. Proc. .... 8  
 ECON 103 and 104 Prin. .... 8  
 ECON 316 Econ. and the Law ..... 4  
 FIN 325 Managerial Finance ..... 4  
 JOUR 250 Adv. Prin. .... 4  
 MKT 301 Mkt. Prin. .... 4  
 MGT 300 Mgt. .... 4  
 MGT 325J Comm. Behavior in Mod. Organization ..... 4  
 MIS 200 Intro to Bus. Comp. .... 4  
 MIS 220 or CS 230 ..... 4  
 OR  
 MIS 325 PCLAN Applications ..... 4  
 MIS 330 COBOL Program. .... 4  
 ECON/ACCT Electives ..... 4-8

**Chemistry**

A student may earn a B.S.Ed. in the College of Education or an A.B. or B.S. in chemistry in the College of Arts and Sciences and meet teacher certification requirements. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach chemistry as the major field, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach chemistry in grades 7-12, inclusive.

Students are strongly urged to complete a second teaching field preferably in another science or in mathematics. Program sheets detailing specific course requirements in these minors are available from Student Services, McCracken Hall.

**Methods Courses:**

EDSE 478 Teaching of Physical Science ..... 3  
 EDSE 478L Field Exp. .... 1-2

**Major Requirements: 84-102**

BOT 110 Intro to Botany ..... 6  
 OR  
 ZOOL 170 Intro to Zoology ..... 5  
 CHEM 151, 152, 153 Fund. of Chem. .... 15  
 CHEM 241, 242 Quant. Analysis ..... 5  
 CHEM 301, 302, 303, 304\* Organic ..... 11  
 OR  
 CHEM 305, 306, 307, 308, 309 ..... 15  
 CHEM 325 Instr. Meth. of Analysis ..... 4  
 OR  
 Any two of the following pairs of courses:  
 CHEM 431 & 434 ..... 4  
 CHEM 432 & 435 ..... 4  
 CHEM 433 & 436 ..... 4  
 CHEM 351\* Physical ..... 4  
 OR  
 CHEM 453, 454, 455 Physical ..... 9  
 CHEM 476 Modern Inorganic ..... 4  
 CHEM 489 Basic Biochem ..... 4

GEOL 101 Intro to Geology ..... 5  
 PHIL 216 Phil Sci Survey ..... 3

\*Must choose one of the long sequences in organic, instrumental, or physical chemistry. The long sequence in physical chemistry will require more mathematics and more physics.

**Communications Comprehensive — Option One (Speech Emphasis)**

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach in communication with an emphasis in speech, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach English, speech, journalism, reading, and an integrated communications course in grades 7-12, inclusive.

**Methods Course:**

INCO 421 Instructional Training  
 and Devel. in Comm. .... 5

**Major Requirements: 116****Applied Communication Courses (45)**

INCO 101 Fund. of Human Comm. .... 4  
 INCO 103 Fund. of Pub. Spkng. .... 4  
 INCO 104 Listening ..... 4  
 INCO 205 Group Discussion ..... 4  
 INCO 206 Comm in Inter. Relationships ..... 4  
 INCO 215 Argumentative Analysis and Advocacy ..... 4  
 INCO 220 Oral Interp. of Literature ..... 4  
 INCO 217A Forensic Workshop ..... 1-6  
 INCO 217B Forensic Workshop ..... 1-6  
 INCO 234 Intro to Comm Theory ..... 4  
 INCO 404 Principles and Tech Interviewing ..... 4  
 INCO 420 Gender and Comm ..... 4

**Electives (3) chosen from:**

TCOM 270, 441  
 THAR 210, 270, 271, 272, 320

**English (30 hours)**

ENG 200 Intro to Lit. .... 4  
 ENG 307 Struc. of Am. Engl. .... 5  
 ENG 308J Adv. Comp. .... 4

**Select two of the following (9-10 hours):**

ENG 301 Shakespeare: Histories  
 ENG 302 Shakespeare: Comedies  
 ENG 303 Shakespeare: Tragedies  
 ENG 312 Medieval & Renaissance Engl. Lit.  
 ENG 313 Restoration & Neo-Classical Engl. Lit.  
 ENG 314 Romantic & Victorian Lit.  
 ENG 360 Major Authors: Engl.

**Select one of the following (4-5 hours):**

ENG 317A, B, C Am. Lit. by Black Authors  
 ENG 321 Am. Lit. to Civil War  
 ENG 322 Am. Lit. Since Civil War  
 ENG 361 Major Authors: Am.

**Select one of the following (4-5 hours):**

HUM 307, 308, 309 Great Books  
 ENG 204 Internat. Lit.: Classical  
 ENG 205 Internat. Lit.: Romantic  
 ENG 206 Internat. Lit.: Modern  
 ENG 306A, B, C Oriental Lit.

Select sufficient hours of English courses at the 200 level or above to bring total to 30 quarter hours.

**Journalism (23, or 30 hrs. for certification)**

(Must pass Journalism English proficiency test)

JOUR 231 News Writing ..... 4  
 JOUR 333 News Editing ..... 4  
 JOUR 411 Communication Law ..... 4  
 JOUR 412 Ethics and Media and Society ..... 3  
 JOUR 489 Jour Workshop (Sch Pub) ..... 4

**Select one of following:**

JOUR 250 Advertising Principles ..... 4  
 JOUR 221 Graphics of Communication ..... 5

## Reading (18 hours)

EDEL 311 Tchng Reading Elem. School .....	4
EDEL 311L Field Experience .....	1
EDEL 411 Diag. & Treat. Read. Disab. ....	4
EDEL 412 Practicum .....	4
EDSE 420 Tchng. Reading Content Area .....	4
EDSE 420L Field Experience .....	1

### Communications Comprehensive — Option Two (English Emphasis)

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach in the field of communication with an emphasis in English, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach English, speech, journalism, reading, and an integrated communication course in grades 7-12, inclusive.

## Methods Courses:

EDPL 360 Field Exp. ....	2
ENG 450A Tchng. Lang. & Comp. ....	3
ENG 450B Tchng. Lit. ....	3

## Major Requirements: 107-109

## English (44)

ENG 200 Intro to Lit. ....	4
ENG 312 Medieval & Renaissance Engl. Lit. ....	5
ENG 313 Restoration & Neo-Classical ....	5
ENG 314 Romantic & Victorian Lit. ....	5
ENG 307 Struct. of Am. Engl. ....	5
ENG 308J Adv. Comp. ....	4
ENG 322 Am. Lit. Since Civil War ....	5
ENG 350 Mech. Gram. & Usage ....	3
Select one of the following ....	4
ENG 361 Major Authors: Am. ....	
ENG 362 Major Authors: Internat. ....	
ENG 460 Literary Genres ....	4

## Speech (30)

Choose 30 hrs. from following with 4 hrs. at 400 level.

## Applied Communication Courses:

INCO 101 Fund. of Human Comm. ....	4
INCO 103 Fund. of Pub. Spkng. ....	4
INCO 104 Listening ....	4
INCO 205 Group Discussion ....	4
INCO 206 Comm in Inter. Relationships ....	4
INCO 215 Argumentative Analysis and Advocacy ....	4
INCO 217A Forensic Workshop ....	1-6
INCO 217B Forensic Workshop ....	1-6
INCO 220 Oral Interp. of Literature ....	4
INCO 234 Intro to Comm Theory ....	4
INCO 404 Principles and Tech Interviewing ....	4
INCO 420 Gender and Comm ....	4

## Electives

TCOM 270, 441	
THAR 210, 270, 271, 272, 320	

## Journalism (23, or 30 hrs. for certification)

(Must pass Journalism English proficiency test)

JOUR 231 News Reporting .....	4
JOUR 333 News Editing .....	4
JOUR 411 Communication Law .....	4
JOUR 412 Ethics and Media and Society .....	3
JOUR 489 Jour Workshop (Sch Pub) .....	4
Select one of following:	
JOUR 250 Advertising Principles .....	4
JOUR 221 Graphics of Communication .....	5

## Reading (18)

EDEL 311 Teaching Reading Elem. Sch. ....	4
EDEL 311L Field Experience .....	1
EDEL 411 Diag. & Treatment Read. Disab. ....	4
EDEL 412 Practicum .....	4
EDSE 420 Teach Read. Content Area .....	4
EDSE 420L Field Experience .....	1

### Comprehensive Business Education

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach business education, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach business education in grades 7-12, inclusive.

## Methods Course:

EDSE 470 Tchng. of Bookkeeping-Basic Bus. ....	3
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## Major Requirements: 93-95

## Typewriting and Office Procedures\*

MGT 325J Business Communications .....	4
MIS 200 Intro to Bus Comp .....	4
MIS 220 or CS 230 Intro to Bus File Proc .....	4
MIS 325 PC Lan Applications .....	4
OR	
MIS 330 COBOL .....	4
OMT 121, 122, 123 Typewriting Courses .....	9
OMT 151 Alphabetic Shorthand (6 hours beyond OMT 151 for certification) .....	3
OMT 171 Administrative Support I .....	3
OMT 172 Administrative Support II .....	3
OMT 221 Machine Transcription .....	3
OMT 225 Word Processing I .....	3
OMT 226 Word Processing II .....	3

## Business and Economics (40)

ACCT 201 Financial Acct. ....	4
ACCT 202 Managerial Acct. ....	4
BUSL 255 Law & Society ....	4
BUSL 356 Law of Mgt. Proc. ....	4
ECON 103 Prin. ....	4
ECON 104 Prin. ....	4
ECON 316 Econ. and the Law ....	4
FIN 301 Intro to Finance ....	4
MKT 301 Mkt. Prin. ....	4
MGT 300 Mgt. ....	4

## Electives in Business and Related Areas (10)

Select 10 quarter hours of electives from the following:

ACCT 310 or 311 .....	4
ECON 303 or 304 or 337 or 360 .....	4
JOUR 250 Advert. Prin. ....	4
MATH 163A Intro to Calculus .....	4
MATH 250B Finite Math .....	4
MKT 444 Consumer Behavior .....	4

\*Ohio University does not offer courses in these areas except on the Chillicothe and Lancaster campuses. Students following this major must take these courses at the Chillicothe and Lancaster campuses or at another institution. Courses could be taken at a four-year accredited institution or at certain technical institutions. Any courses taken to fulfill these requirements should be approved by Student Services in the College of Education to ensure applicability toward certification.

### Earth Science

A student may earn a B.S.Ed. in the College of Education or an A.B. or B.S. in geological sciences or geography in the College of Arts and Sciences and meet teacher certification requirements. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach earth science as a major field, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach earth science in grades 7-12, inclusive.

Students are strongly urged to complete a second teaching field, preferably in another science or mathematics. Program sheets detailing specific course requirements in these minors are available from Student Services, McCracken Hall.

**Methods Courses:**

EDSE 472 Tchng. of Earth Science .....	3
EDSE 472L Field Exp. ....	1 2

**Major Requirements: 87-88****Tool Courses (36-37)**

BOT 110 or ZOOL 170 Intro to .....	6
CHEM 121, 122, 123 Intro to .....	12
MATH 163A, 163B Intro to Calc .....	7
OR	
MATH 263A and 263B Intro to Calc .....	8
PHIL 216 Phil Sci Survey .....	3
PHYS 201, 202 Intro to Phys .....	8

**Earth Science Courses (51)**

GEOG 101 Physical Geog .....	5
GEOG 201 Environmental Geog .....	4
GEOG 302 Meteorology .....	5
GEOG 303 Climate .....	5
GEOL 101 Intro .....	5
GEOL 211 Oceanography .....	4
GEOL 256 Historic Geol .....	4
GEOL 310 Rocks and Minerals .....	6
GEOL 330 Geomorphology .....	5
GEOL 462 Geodynamics .....	4
PSC 100D The Universe .....	4

**Educational Media Programs**

The Educational Media Academic Area provides two undergraduate majors and two undergraduate minors. One of the majors is designed to prepare media specialists to work in the public schools. Upon completion of this program, and passing scores earned on the National Teacher's Exam, students become eligible for teacher certification as media specialists, grades K-12. The other major prepares media personnel to work in business/industry, the health sciences, and higher education nonteaching capacities. Both minors are designed to prepare media specialists to work in the public schools, one in grades K-8, the other in grades 7-12. Upon completion of either minor, the student becomes eligible for teacher certification as a media specialist.

**Certificated Media Major****Methods Course:**

EDM 489 Organization and Administration of Ed. Media Prog. ....	5
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**Major Requirements: 105****Required Core Courses (75)**

EDM 201 Use of Library Media Resources I .....	3
EDM 289 Sophomore Practicum .....	2
EDM 304 Acquisition and Pres. of Mats. ....	3
EDM 305 Use of Library Media Resources II .....	3
EDM 332 Microcomput. in Ed. ....	4
EDM 389 Junior Practicum .....	2
EDM 403 Basic Catalog and Class. ....	5
EDM 404 Basic Catalog, Non-print Mats. ....	4
EDM 480 Intro to Ednl. Media .....	4
EDM 481 Fund. of Instruct. Design and Devel. Media Emph. ....	4
EDM 482 Product. of Instruct. Mats. ....	4
EDM 483 Select. & Eval. of Media .....	4

**Required Courses**

EDEL 200 Studies of Children .....	4
OR	
HECF 160 Intro to Child Devel. ....	4
EDEL 321, EDEL 321L Children's Lit. ....	4
EDM 301 Library Serv. to Children .....	4
EDM 302 Adoles. Mats. and Serv. ....	4
EDM 303 Tchng. Library Skills K-12 .....	3
Select 8 quarter hours from the following:	
ART 151 Intro to Graphic Design .....	4
ART 191 Intro to Photog. ....	4
EDCI 461 Intro to Individualiz. of Instruct. ....	4

TCOM 200A, B, C Telecommunications Wrting. & Prod. Planning, Audio Prod. I, Video Prod. I .....	12
Select 6 quarter hours from the following:	
CS 120 Computer Science Survey .....	5
EDEL 310, 310L Teach. Lan. Arts Elem. Sch. ....	5
EDEL 311 Teach. Read. Elem. Sch. ....	4
EDEL 311L Field/Clinical Exper. ....	1
EDSP 271 Intro to Ed. of Except Child .....	4
INCO 234 Intro to Comm. Theory .....	5
Students must complete second teaching field: 30-45 hrs.	

**Noncertificated Media Major (117)**

All students pursuing this program must complete 32 quarter hours in a related area. The related area includes coursework, internship, or both in the environment in which the student has elected to seek employment. The specific courses are to be determined with the student's advisor and then placed on file in the student's folder in Student Services, McCracken Hall.

**Required Core Courses: 42**

EDM 201 Use of Library Media Resources I .....	3
EDM 289 Sophomore Practicum .....	2
EDM 304 Acquisition and Preserv. of Mats. ....	3
EDM 305 Use of Library Media Resources II .....	3
EDM 332 Micro. in Ed. ....	4
EDM 389 Junior Practicum .....	2
EDM 403 Basic Catalog & Class. ....	5
EDM 404 Basic Catalog, Non-print Mats. ....	4
EDM 480 Intro to Ednl. Media .....	4
EDM 481 Fund. of Instruct. Design and Devel. Media Emph. ....	4
EDM 482 Product of Instruct. Mats. ....	4
EDM 483 Select. & Eval. of Media .....	4

**Required Courses: 43**

ART 151 Intro to Graphic Design .....	4
ART 191 Intro to Photography .....	4
ART 192 Basic Photography .....	4
CS 120 Computer Science Survey .....	5
EDCI 461 Intro to Individualiz. of Instruct. ....	4
EDM 489 Organiz. & Admin. of Ednl. Media Progs. ....	5
INCO 234 Intro to Comm. Theory .....	4
TCOM 200A, B, C Telecommunications Wrting. & Prod. Planning, Audio Prod. I, Video Prod. I .....	12

**English Comprehensive**

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach English, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach English in grades 7-12, inclusive.

**Methods Courses:**

EDPL 360 Field Exp. ....	2
ENG 450A Tchng. Lang. & Comp. ....	3
ENG 450B Tchng. Lit. ....	3

**Major Requirements: 62-66**

ENG 200 Intro to Lit. ....	4
Select one of the following .....	5
ENG 301 Shakespeare: Histories	
ENG 302 Shakespeare: Comedies	
ENG 303 Shakespeare: Tragedies	
Select one of the following .....	5
ENG 307 Struct. of Am. Engl.	
ENG 351 Hist. of Engl. Lang.	
ENG 352 Devel. of Am. Engl.	
ENG 308J Adv. Comp. ....	4
ENG 312 Medieval & Renaissance Engl. Lit. ....	5
ENG 313 Restoration & Neo-Classical Engl. Lit. ....	5
ENG 314 Romantic & Victorian Lit. ....	5

ENG 322 Am. Lit. Since Civil War .....	5
ENG 350 Mech. Grammar & Usage .....	3
Select one of the following .....	5
ENG 321 Am. Lit. to Civil War .....	
ENG 317A, B, or C Am. Lit. by Black Authors .....	
ENG 331 20th Cent. Brit. & Am. Lit. ....	
Select one of the following .....	4
ENG 361 Major Authors: Am. ....	
ENG 362 Major Authors: Internat. ....	
ENG 460 Lit. Genres .....	4
Select one of the following .....	4-5
ENG 204 Internat. Lit.: Classical .....	
ENG 205 Internat. Lit.: Romantic .....	
ENG 206 Internat. Lit.: Modern .....	
ENG 306A,B,C Oriental Lit. ....	
HUM 307, 308, 309 Great Books .....	
EDSE 420 Tchng. Reading in Jr. & Sr. H.S. ....	4
EDSE 420L Field Exp. ....	1

### **General Speech — Option One (INCO Emphasis)**

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach speech with an interpersonal communication emphasis, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach speech in grades 7-12, inclusive.

#### **Methods Course:**

INCO 421 Instructional Train. & Devel. in Comm. ....	5
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#### **Major Requirements: 57**

##### **Applied Communication Courses**

INCO 101 Fund. of Human Comm. ....	4
INCO 103 Fund. of Pub Spkng .....	4
INCO 104 Listening .....	4
INCO 205 Group Discussion .....	4
INCO 206 Comm in Inter Relationships .....	4
INCO 215 Argumentative Analysis and Advocacy .....	4
INCO 220 Oral Interp of Lit .....	4
INCO 217A Forensic Workshop .....	1-6
INCO 217B Forensic Workshop .....	1-6
INCO 234 Intro to Comm Theory .....	4
INCO 404 Principles and Tech Interviewing .....	4
INCO 420 Gender and Comm .....	4

Electives in INCO/THAR to bring total hrs. to 57.

THAR 210, 211, 212 Acting I, II, III or 210y, 211y, 212y .....	4
THAR 270, 271, 272 Theater Hist .....	3
THAR 135, 235, 335, 435 Prod. Design .....	2-4
THAR 465 Pract in Dir (arr., School of Theater) .....	2-4
THAR 427 Pract in Stage Mgt (arr., School of Theater) .....	2-4

### **General Speech — Option Two (Theater Emphasis)**

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach speech with a theater emphasis, the following program must be completed and passing scores earned on National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach speech in grades 7-12, inclusive.

#### **Methods Course:**

INCO 421 Instructional Train. & Devel. in Comm. ....	5
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#### **Major Requirements: 93**

##### **Fundamental Processes (13)**

INCO 101 Fundamentals of Human Communication .....	4
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INCO 433 Applic. of Gen. Semantics .....	4
THAR 101 and 102 or 103 .....	2
THAR 110 or 110y Intro to Performance .....	4
Theory and History (32) .....	
INCO 234 Intro to Comm. Theory .....	4
JOUR 105 Intro to Mass Comm. ....	4
TCOM 270 Telecommunications & the Pub. ....	4
THAR 172 Elem. Perf .....	3
THAR 270 Theater Hist. I .....	4
THAR 271 Theater Hist. II .....	4
THAR 272 Theater Hist. III .....	4
THAR 320 Dir. I .....	4
Forms of Speech (49) .....	
INCO 103 Pub. Spkng. ....	4
INCO 215 Argumentative Analysis and Advocacy .....	4
INCO 220 Oral Interp. ....	4
THAR 130 Intro to Stagecraft .....	3
THAR 131 Intro to Lighting .....	3
THAR 132 Intro to Costuming .....	3
THAR 210 or 210y Acting I .....	4
Electives above 200 .....	12 hrs.
No more than 4 hrs. Practicum .....	

Select 10 hours from the following THAR practica. At least two of the following areas must be covered:

THAR 215, 315, 415 Acting .....	
THAR 135, 235, 335, 435 Prod. Design .....	
THAR 105, 205, 305, 405 Mgt. ....	
THAR 465 Dir. (arr., School of Theater) .....	
THAR 427 Stage Mgt. (arr., School of Theater) .....	

### **Health Education**

Students majoring in health education will normally enroll in the College of Health and Human Services. Regardless of the college of the university from which a student graduates, if he or she wishes to be certified through Ohio University to teach health, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which the program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach health in grades 7-12 inclusive.

#### **Methods Course:**

HLTH 379 Tchng. of Health .....	5
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#### **Required General Education Courses:**

CHEM 121 Principles of Chemistry .....	4
GEOG 201 or GEOL 201 .....	4
MATH .....	5
SOC 101 Intro to Sociology .....	5
ZOOL 101 Intro to Zoology .....	5

#### **Major Requirements: 58**

HECF 360 Human Sexuality .....	3
OR .....	
ZOOL 103 Human Biology .....	5
HEFN 128 Intro to Nutrition .....	4
HLTH 101 Intro to Health and Hum. Serv. ....	2
HLTH 202 Hlth Sci and Lifestyle .....	4
HLTH 204 Drugs, Alcohol, and Tobacco .....	3
HLTH 227 First Aid .....	3
HLTH 228 CPR .....	1
HLTH 327 Inst First Aid .....	3
HLTH 328 CPR Inst .....	2
HLTH 380 Safety Education .....	4
HLTH 390 Community Health .....	4
HPES 409 Tests and Measurements .....	4
HLTH 495 School Health Problems .....	5
MICR 211, 212 Environment Micro .....	6
ZOOL 301 Anatomy .....	6
ZOOL 345 Physiology .....	4

### **Home Economics**

Students majoring in any of the vocational home economics education options will normally enroll in the

College of Health and Human Services. Regardless of the college of the university from which a student graduates, if he or she wishes to be certified through Ohio University to teach vocational home economics, at least one of the following programs must be completed and passing scores earned on the National Teacher's Exam. The consumer and homemaking program prepares a person for two four-year provisional certificates (high school and vocational consumer and homemaking) which qualifies the holder to teach either general home economics or vocational consumer and homemaking in grades 7-12 inclusive. The job training certification programs prepare a person for a four-year provisional vocational job training certificate in a specific content field which qualifies the holder to teach that content area in a vocational home economics job training program.

#### Methods Course:

HECE 340 Tchng. Home Econ. ....	4
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#### Basic Requirements: 73

HECE 395 Home Mgt. ....	3
HECF 371* Family Devel. ....	3
HEFN 128* Intro Nutrition ....	4
HEID 180* Intro to Res. Design ....	3

#### Specialized Requirements:

HECE 390 Family Consumer Econ. ....	3
HECE 396 Home Mgt. Lab. ....	4
HECE 391 Equipment ....	4
HECE 299* Seminar ....	5
HECE 399* Seminar ....	5
HECF 160* Intro to Child Devel. ....	4
HECF 361 Preschool Guidance ....	4
HEFN 120* Meal Mgt. ....	3
HEFN 222* Food Science Prin. ....	4
HETC 213* Design Analysis: Theory & Prin. ....	4
HETC 315 Elem. Textiles ....	4
HETC 117* Textiles & Dress & Environment ....	3
Approved Electives from 300- and 400-level courses in:	
Food and Nutrition ....	3-4
Textiles and Clothing ....	3-4
Interior Design ....	3-4
Child Development and Family Life (except HECF 370)	
Select two courses ....	6

\*No grade below a 2.0 (C) is acceptable toward completion of these courses in the program.

Must maintain a g.p.a. of 2.3 (C+) or better, in all other courses listed under Home Economic Basic and Spec. requirements.

Students may complete requirements for job training certification by taking 45 hours of coursework in a specialized area of home economics. Permission must be granted by the home economics education advisor. The three options are *Job Training — Child Care Service*; *Job Training — Food Service*; and *Job Training — Home and Community Services*.

Students must meet with their home economics education advisor to make sure general education and certification requirements will be met.

### Latin

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach Latin, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach Latin in grades K-12, inclusive.

Each person selecting Latin as a major teaching field must have a minor or second teaching field. Requirements for all of the second teaching fields are available from Student Services, McCracken Hall.

#### Methods Courses:

EDEL 310 Tchng Lang Arts - Elem Sch .....	3
EDEL 310L Lang Arts - Field Exp .....	2
LAT 361 Tchng. of H.S. Latin .....	3

#### Major Requirements: 68

CLNG 401 Life of Romans .....	3
LAT 111, 112, 113 Beginning Latin .....	12
LAT 211, 212, 213 Intermediate Latin .....	12
Students entering with two years of high school Latin must complete at least 44 hours of Latin numbered above 113, including:	
LAT 433 Advanced Latin Syntax .....	3
One other 400 level Latin course	
Students entering with three or four years of high school Latin will normally register for LAT 351, Latin Prose and Poetry — 3 hours, and then must complete at least 44 hours more of Latin including:	
CLNG 401 Life of Romans .....	3
LAT 433 Adv. Latin Syntax .....	3
One other 400-level Latin course	

### Mathematics

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach mathematics, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach mathematics in grades 7-12, inclusive.

#### Methods Course:

MATH 320 Teaching of Math in Secondary School .....	4
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#### Major Requirements: 60

Select at least 51 qtr hrs as follows:

CS 230 Computer Programming .....	5
MATH 263 A, B, C, D, Calculus .....	16
MATH 211 Linear Algebra .....	4
MATH 330A Foundations of Geometry .....	3
MATH 330B Foundations of Geometry .....	3
Electives in mathematics at 200 level or above .....	8
Mathematics at the junior/senior level, excluding 320 ....	12

An additional 9 quarter hours are required and may be selected from any one or combination of the following:

Mathematics at the 200 level or above excluding MATH 320
Computer science at the 200 level or above
Physics 251, 252
Philosophy 320, 420, 421

Suggested Math electives:

MATH 250B, 300, 306, 307, 314, 360, 406, 450A, 450B

### Modern Languages Comprehensive

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach one of the modern foreign languages, the following program must be completed and passing scores earned on the National Teacher's Exam. This program prepares a person for a certificate to teach one of the modern foreign languages (French, German, Spanish) in grades K-12. Candidates for certification will be required to pass a foreign language proficiency examination before certification.

Students who have completed one year or less of high school work in the language in which they are majoring should start with ML 111 — Elementary Language — 4 hours. Students who have completed two or three years of high school work in the language in which they are majoring should start with ML 211 — Intermediate Language — 4 hours. Students who have completed four or more years of high school work in the language in which they are majoring should start with ML 213 (or above).

**Methods Courses:**

EDEL 310 Tchng Lang Arts - Elem Sch .....	3
EDEL 310L Lang Arts - Field Exp .....	2
ML 410 Lang. Lab. ....	3
ML 445 Tchng. of Mod. Foreign Lang. ....	3

**Major Requirements: 68**

LANG 111, 112, 113 Basic or 114 Intensive .....	12
All students must have 56 hours above LANG 113.	
LANG 211, 212, and 213 .....	12
LANG 341, 342, 343 Adv. Conversation & Comp. ....	12
LANG 348 or 349 Civ. & Culture .....	4
LANG 355 and 356 Lit. Readings .....	8
LANG 354 (Span. majors only) .....	4
LANG 437 Phonetics .....	4
LANG 439 or 441 Stylistics .....	4
Electives at 400 level or above .....	8
Study Abroad Recommended — If student does not study abroad, then three courses at 400 level are required.	

**Music Education with Instrumental Emphasis**

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach instrumental music, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional special field certificate which qualifies the holder to teach music in grades K-12, inclusive.

**Methods Courses:**

MUS 362 Teaching Inst Music in the Elem. & Mid. School .....	3
MUS 363 Secondary School Inst. Methods and Materials .....	3
MUS 464 Marching Band Techniques .....	2
MUS 465 Jazz Ensemble Methods .....	2

**Major Requirements: 111-128**

Applied Music (in major instrument sufficient to pass prof. test—See School of Music Handbook) .....	18
Second Instr. Proficiency in piano as outlined in School of Music Handbook. (If piano is major instrument, proficiency on a band/orchestra instrument is also required.) .....	6-12
Major Performing Groups (minimum one per quarter) .....	11
MUS 90 (to be taken nine quarters) .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music History and Lit. ....	3
MUS 147, 148 Class Voice .....	4
MUS 163 Intro to Music Education .....	2
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dict. & Sight Sing. ....	6
MUS 261 String Meth. & Materials .....	2-4
MUS 263 Wind & Perc. Methods .....	10-12
MUS 304 Instrumentation .....	3
MUS 322, 323 History of Music .....	6
MUS 465 Jazz Ensemble Methods .....	2
MUS 413, 413A, Intro to Electronic Music .....	2
MUS 455, 456A Conducting .....	6
MUS 464 Marching Band Techniques .....	2
Music Ed. electives .....	4-5
Music History elective .....	3

NOTE: Some of the courses in this program are under revision. Students should contact the School of Music for current information about their requirements.

**Music Education with Choral Emphasis**

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach choral music, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional special field certificate which qualifies the holder to teach music in grades K-12, inclusive.

**Methods Courses:**

MUS 364 Sec. Sch. Vocal Tech. ....	3
MUS 366 Teach. of Mus. in the Elem. Grds. ....	3
MUS 468 Gen. Music in Jr. H.S. ....	3

**Major Requirements: 92-104**

Applied Music .....	18
Major instrument (voice or piano sufficient to pass prof. test—See School of Music Handbook for requirement)	
Secondary instrument (voice or piano sufficient to pass prof. test—See School of Music Handbook for requirement) .....	6-12
Major Performing Groups (minimum one per quarter) .....	11
MUS 90 (to be taken nine quarters) .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Introduction to Music History and Lit. ....	3
MUS 163 Intro to Music Education .....	2
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dict. & Sight Sing. ....	6
MUS 261 String Methods and Materials .....	2
MUS 263 Wind & Perc. (3 qtrs., 2 hrs. ea.) .....	6
MUS 283 Recreational Music Inst. and Materials .....	3
MUS 322 and 323 History of Music .....	6
MUS 413, 413A Intro to Electronic Music .....	2
MUS 455 and 456, 456B Conducting .....	6

**Physics**

A student may earn a B.S.Ed. in the College of Education or an A.B. or B.S. in physics in the College of Arts and Sciences and meet teacher certification requirements. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach physics as the major field, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach physics in grades 7-12, inclusive.

Students are strongly urged to complete a second teaching field preferably in another science or in mathematics. The hours required to complete a minor in math or the other science fields are approximately: math — 25 hrs., biology — 39 hrs., chemistry — 30 hrs., earth science — 40 hrs., general science — 18 hrs. Program sheets detailing specific course requirements in these minors are available from Student Services, McCracken Hall.

**Methods Courses:**

EDSE 478 Tchng of Physical Sci .....	3
EDSE 478L Field Experience .....	2

**Major Requirements: 96-98**

Tool Courses (48-49)	
BOT 110 Intro .....	6
OR	
ZOOL 170 Intro to Zoology .....	5
GEOL 101 Intro to Geology .....	5
CHEM 151, 152, 153 Fund of Chem .....	15
MATH 263A, 263B, 263C, 263D Anal Geom .....	16
MATH 340 Differential Equations .....	4
PHIL 216 Phil Sci Survey .....	3
Physics Courses (48-49)	
PHYS 201, 202, 203, 315 Intro to Physics .....	16
OR	
PHYS 251, 252, 253 General Physics .....	15
PHYS 272, 273 Electronics Lab .....	4
PHYS 311, 312 Mechanics .....	8
PHYS 351, 352, Modern Quan Phys .....	8
PHYS 371, 372, 373 Intern Lab .....	6
Choose 7 hrs. of electives from the following:	
PHYS 411 Thermodynamics .....	4
PHYS 412 Kinetic Theory and Stat .....	4
PHYS 420 Acoustics .....	3
PHYS 423 Geometrical and Phys Optics .....	4
PHYS 427 Electricity and Magnetism .....	4
PHYS 428 Electricity and Magnetism .....	4



### Physical Education

Students majoring in physical education will normally enroll in the College of Health and Human Services. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach physical education, the following program must be completed and passing scores earned on the National Teacher's Exam. The certificate for which the program prepares a person is a four-year provisional special field certificate which qualifies the holder to teach physical education in grades K-12 inclusive.

#### Methods Course:

HPES 402 Teaching Strategies in Physical Education ..... 3

#### Major Requirements: 83-93

##### (Elementary-Secondary Certification)

HLTH 227 First Aid .....	3
HLTH 495 School Health Prob. ....	5
HPES 105 Cond. for Activ. & Organic Effic. ....	2
HPES 106 Intro to Human Movement .....	2
HPES 115 Rhythmics .....	2
HPES 134 Intro Field Exp. In Phys. Ed .....	2
HPES 222 Tumbling & Mod. Gymnastics .....	2
HPES 223 Track and Field .....	2
HPES 225 Gymnastics for Men and Women .....	2
HPES 234 Field Experience .....	1-4
HPES 273 Movement Educ. & Fund. Skills .....	3
HPES 275 Elem. School Rhythm & Dance .....	3
HPES 302 Biomechanics .....	4
HPES 333 Theory of Adapted Activities .....	3
HPES 334 Field Experience .....	1-4
HPES 345 Intro to Exer. Phys. ....	4
HPES 372 Theory and Practice of Sports .....	3
HPES 377 Theory and Practice of Elem. Phys. Educ. ....	3
HPES 404 History and Prin. of Physical Education .....	4
HPES 405 Motor Learning .....	4
HPES 406 Org. and Administration .....	4
HPES 409 Tests and Measurements .....	4
HPES 434 Field Experience .....	1-4
ZOOL 301 Human Anatomy .....	6
AQUATICS: (Select 2 credits)	
HPES 104 Intermed. Swimming .....	2
HPES 218 Life Guard Training .....	2
HPES 220 Water Safety Instructors .....	3
DANCE: (Select 2 credits)	
HPES 107 Modern Dance I .....	2
HPES 116 Social Forms of Dance .....	2
HPES 117 Folk and Square Dancing .....	2
INDIVIDUAL SPORTS: (Select 2 credits)	
HPES 141A Archery .....	1
HPES 141B Golf .....	1
HPES 221A Tennis .....	1
HPES 221B Badminton .....	1
HPES 224A Racquetball .....	1
HPES 224B Wrestling .....	1
TEAM SPORTS: (Select 4 credits)	
HPES 260A Flag Football .....	1
HPES 260B Team Handball .....	1
HPES 262A Field Hockey .....	1
HPES 262B Soccer .....	1
HPES 263A Basketball .....	1
HPES 263B Volleyball .....	1
HPES 264A Softball .....	1
HPES 264B Lacrosse .....	1
OUTDOOR EDUCATION: (Choose one of following:)	
HREC 291 Outdoor Pursuits .....	3
HREC 311 Expedition Management .....	3
HREC 314 Camping .....	4
HREC 315 Outdoor Education and Recreation .....	4

### Social Studies Comprehensive

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach under the social studies comprehensive, the following program must be completed

and passing scores earned on the National Teacher's Exam. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach history, an integrated social studies course, and any other component area in which at least 30 hours have been completed, in grades 7-12, inclusive.

Each student is to complete the required 36 hours of history and then complete 30 hours in one (or more if desired) of the other four fields (political science, economics, geography, psychology/sociology) and eight hours in each of the remaining fields. For example, a student would complete the required 36 hours of history, the 30 hours required in political science, and the required eight hours in each of the fields of economics, geography, psychology/sociology. In this example the certificate issued would be valid for teaching history, an integrated social studies course, and political science.

#### Methods Course:

EDSE 479 Tch. Soc. Sci. In Jr. & Sr. H.S. .... 3

#### Major Requirements: 90

##### History: 36

HIST 131 Intro to Third World ..... 4

Select two of the following:

HIST 101, 102, 103 Western Civ. .... 8

OR

HIST 121, 122, 123 ..... 8

Select two of the following:

HIST 211, 212, 213, U.S. Hist. .... 8

Select two courses for a minimum of 6 hrs of either U.S. or Modern European history at 300 level or above (Ohio history recommended)

Select two courses for a minimum of 6 hrs of non-U.S., non-modern European history

Select sufficient electives in history at the 300 level or above to bring total to 36 hrs.

Select a minimum of 30 qtr hrs in ONE of the following fields AND a minimum of 8 qtr hrs in each of the other fields:

##### Political Science:

POLS 101\* and 102\* OR 103\* Amer. National.

Select 22 additional qtr hrs to fulfill 30 hr field.

CHOOSE ONE COURSE FROM EACH OF THE FOLLOWING AREAS:

1. Comparative Politics

(POLS 230, 331, 333, 340, 432, 434, 435, 436, 438, 441, 445, 446, 447A, 447B, 448.)

2. Constitutional Law

(POLS 401, 402, 409, 413)

3. American Politics

(POLS 304, 306)

4. Urban

(POLS 320, 323)

5. International

(POLS 250, 351, 354, 427, 452)

6. American Political Parties

(POLS 405, 410, 415, 417, 418, 481, 485)

##### Economics:

ECON 103\* and 104\* OR 301\* and 302\*

Select 22 additional qtr hrs from the following to fulfill 30 hr field: ECON 303, 304, 340, 352, 360, 370, 371, 372, ECED 346

##### Geography:

GEOG 101\* and GEOG 121\*; select one elective in regional geography (GEOG 131, 132, 232, 233, 234, 330, 331, 332, 335, 338) and one elective in upper level systematic geography (GEOG 302, 303, 321, 322, 324, 325, 344, 350, 353, 411, 447, and 455) and any needed electives.

##### Psychology/Sociology:

Select one course from each area OR 12-18 hrs of psychology and 12-18 hours of sociology to complete the 30 hour field.

Psychology

(PSY 121\*, 233, 226, 304, 336)

Sociology

(SOC 101\*, 201, 220)

One from the following:  
(SOC 211, 315, 329, 331, 428, 430, 432)

One from the following:  
(SOC 361, 362, 363, 366, 424)

Select electives in any one or combination of the above fields to bring total qtr hrs to 90.

\*Courses required in 8 qtr hr minimum choice.

**NOTE:** All students pursuing teacher education programs at Ohio University are subject to the Selective Admission and Retention Program in teacher education. Criteria and procedures are available from Student Services, McCracken Hall.

## SPECIAL EDUCATION PROGRAMS

To receive a B.S.Ed. degree and certification in special education, students must complete one of the professional preparation programs for teaching exceptional children and receive passing scores on the National Teacher's Examination. These programs are for teaching (1) Developmentally Handicapped/Severe Behavior Handicapped, (2) Developmentally Handicapped/Specific Learning Disabilities, (3) Multihandicapped, (4) Special Education/Early Childhood, and (5) Hearing and Speech Therapy.

### Developmentally Handicapped/ Severe Behavior Handicapped

#### Required General Education Courses:

Students also must complete Ohio University's program of General Education (see General Education Requirement in the Graduation Requirements section of this catalog) and are urged to consult with their advisors to plan to meet both sets of General Education Requirements.

Humanities	5-8
Five to eight hours of humanities are required. Possible courses include any combination of the following: comparative arts, art history, great books (HUM 107, 108, 109, 307, 308, and 309), philosophy, art (except for ART 360, 461, 462), theater history, and music (except for music education and music therapy courses). No more than three one-hour participation courses would be acceptable.	
Natural Sciences	5-8
Five to eight hours of natural sciences are required. Possible courses include any combination of the following: botany, zoological and biomedical sciences, physics, geological sciences, chemistry, or physical world. One of the courses taken must contain a laboratory component.	
Social Sciences	5-8
Five to eight hours of social sciences are required. Possible courses include the following: anthropology, economics, economic education, geography, political science, history, sociology, or social welfare.	
Psychology	10
PSY 101 Gen. Psy. and five hours of electives in psychology are required. The following are recommended: PSY 121, 231, 233, 241, 304, 310, 312, 315, 336; or EDCE 410.	
INCO 101 or 103 Fund./Pub. Spkg.	4
English	9
Freshman and junior composition requirements	
Hearing and Speech Therapy	5
HSS 108 Intro to Speech Disorders or HSS 336 Speech & Hearing Disorders in the Pub. Schools	
MATH 120 and 121	7
MATH 120 is recommended; however, any mathematics course(s) numbered above 120 equaling four hours would be acceptable (except MATH 151).	
EDEL 330 Tchng Math	2
EDEL 330L Field/Clinical	1
EDM 332 Micro. App. in ED	4
EDSP 355 Micro	4
Music	
MUS 160 Music Fundamentals	3
OR	
MUS 282 Mus. Therapy	3

ART	3-6
ART 360 Art for Elem. Tchrr	6
OR	
ART 373 Devel. Art Ther.	5
OR	
HREC 25i Art & Nat. Crafts	3
Health	
HLTH 202 Hlth Sci and Lifestyles	4
OR	
HLTH 227 First Aid	3
Recreation for the Handicapped	3-5
HREC 250 Recreation Leadership, or HPES 333,	
HREC 433, HREC 315, or HPES 485.	
TIER III	4

#### Major Requirements:

Block I (Freshmen and Sophomores)	
EDCI 275 Learning Process in the Classroom	5
OR	
PSY 275 Educational Psychology	4
EDEL 200 Studies of Children	4
EDSP 160 Field Experience in Special Education	1
EDSP 271 Intro to Education of	
Except. Childrn.	3
Block II (Sophomores)	
EDM 480 Intro to Educational Media	4
EDSP 260 Field Experience in Spec. Educ.	2
EDSP 270 Classroom Management of Children I	3
EDSP 272 Intro to Educ. of Mentally Ret.	3
EDSP 373 Curriculum and Materials for	
Exceptional Learner	4
EDCI 401 Advanced Field Exper./Urban	2
Block III (Sophomores and Juniors)	
EDSP 360 Field Experiences in Special Educ.	3
EDSP 370 Classroom Management II	3
EDSP 374 Lang. Dev. and Adapt.	
for Exceptional Learner	4
EDSP 375 Meth. and Mat. for Tchng.	
Dev. Handicapped Students	4
EDSP 377 Career and Voc. Educ. for Except. Learner	3
Block IV (Juniors)	
EDEL 311 Tchng Reading Elem Sch	4
EDEL 311L Field Exp.	1
EDSP 400 Nature and Needs of SBH	3
EDSP 473 Nature and Needs of Multi.	4
EDSP 485 Diagnosis and Eval. of Handicapped	3
Block VC (Seniors)	
EDSP 401 Meth. of Tchng. SBH	4
EDSP 462 Field Experiences in Special Educ.	3
EDSP 477 Communicating with Parents and	
Professionals in Sp. Ed.	4
EDCI 480 Teacher, School, and Society	3
OR	
EDEL 460 Child and Curr.	4

#### Professional Laboratory Experience:

EDPL 461 and 462 Stu. Tchng.	13
EDPL 465 Stu. Tchng. Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be taken. For example, anyone doing student teaching during any of the three quarters of the school year 1992-93 should apply for student teaching by December 1, 1991. For further information about student teaching, contact the Field Experiences Office. Students must complete Block IV before entering student teaching.

### Developmentally Handicapped/ Specific Learning Disabilities

#### Required General Education Courses:

Students must also complete Ohio University's program of General Education (see General Education Requirement

in the Graduation Requirements section of this catalog) and are urged to consult with their advisors to plan to meet both sets of General Education Requirements.

Humanities	5-8
Five to eight hours of humanities are required. Possible courses include any combination of the following: comparative arts, art history, great books (HUM 107, 108, 109, 307, 308, and 309), philosophy, art (except for ART 360, 460, 461, 462), theater history, and music (except for music education and music therapy courses). No more than three one-hour participation courses would be acceptable.	
Natural Sciences	5-8
Five to eight hours of natural sciences are required. Possible courses include any combination of the following: botany, zoological and biomedical sciences, physics, geological sciences, chemistry, or physical world. One of the courses taken must contain a laboratory component.	
Social Sciences	5-8
Five to eight hours of social sciences are required. Possible courses include the following: anthropology, economics, economic education, geography, political science, history, sociology, or social welfare.	
Psychology	9-10
PSY 101 Gen Psy and five hours of electives in psychology are required. The following are recommended: PSY 121, 231, 233, 241, 304, 310, 312, 315, 336; OR EDCE 410.	
INCO 101 or 103 Fund./Pub. Spkg.	4
English	9
Freshman and junior composition requirements	
EDM 332	4
EDSP 355 Micro. App. in Spec. Ed.	4
Hearing and Speech Therapy	3-5
HSS 108 Intro. to Speech Disorders or HSS 336 Speech & Hearing Disorders in the Pub. Schools	
MATH 120 and 121	7
MATH 120 is recommended; however, any mathematics course(s) numbered above 120 equaling seven hours would be acceptable (except MATH 151).	
Music	
MUS 160 Music Fundamentals	3
OR	
MUS 282 Music Therapy Act.	3
ART	3-6
ART 360 Art for Elem Tchr	6
OR	
ART 373 Devel. Art Ther.	5
OR	
HREC 251 Art & Nat. Crafts	3
Health	
HLTH 202 Hlth Sci and Lifestyles	4
Recreation for the Handicapped	5
HREC 250 Recreation Leadership, or HPES 333, HREC 433, HREC 315.	
TIER III	4
<b>Major Requirements:</b>	
Block I (Freshmen and Sophomores)	
EDCI 275 Learning Process in the Classroom	5
OR	
PSY 275 Educational Psychology	4
EDEL 200 Studies of Children	4
EDSP 160 Field Experience in Special Education	1
EDSP 271 Intro to Education of Except. Childrn.	3
Block II (Sophomores)	
EDCI 401 Advanced Field Exper./Urban	2
EDM 480 Intro to Educational Media	4
EDSP 260 Field Experience in Spec. Educ.	2
EDSP 270 Classroom Management of Children I	3
EDSP 272 Intro to Educ. of Mentally Ret.	3
EDSP 373 Curriculum and Materials for Exceptional Learner	4
Block III (Sophomores and Juniors)	
EDSP 360 Field Experiences in Special Educ.	3
EDSP 370 Classroom Management II	3
EDSP 374 Lang. Dev. and Adapt. for Exceptional Learner	4

EDSP 375 Meth. and Mat. for Tchng. Dev. Handicapped Students	4
EDSP 377 Career and Voc. Educ. for Except. Learner	3
Block IV (Juniors)	
EDEL 311 Tchng Reading El. Sch	4
EDEL 311L Field Exp in Reading	1
EDEL 330 Tchng Math El. Sch	2
EDEL 330L Field Exp in Math	1
EDSP 474 Intro to Specific Learning Disabilities	4
EDSP 485 Diagnosis and Eval. of Handicapped	3
Block V (Seniors)	
EDSP 460 Field Experiences in Special Educ.	3
EDSP 476 Teaching the Learning Disabled	4
EDSP 477 Communicating with Parents and Professionals in Sp. Ed.	4
EDCI 480 Teacher, School, and Society	3
OR	
EDEL 460 Child & Curr.	4

### Professional Laboratory Experience:

EDPL 461 and 462 Stu. Tchng.	13
EDPL 465 Stu. Tchng. Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be taken. For example, anyone doing student teaching during any of the three quarters of the school year 1992-93 should apply for student teaching by December 1, 1991. For further information about student teaching, contact the Field Experiences Office. Students must complete Block IV before entering student teaching.

### Hearing and Speech Therapy

Students majoring in hearing and speech sciences will normally enroll in the College of Health and Human Services. The bachelor's degree in Hearing and Speech Sciences is considered preprofessional. Students entering the program must be eligible to go on to graduate school to obtain clinical certification or to complete coursework and student teaching for certification as a speech therapist in public schools. Passing scores on the National Teacher's Exam also are required. During the senior year, students who have maintained an overall grade-point average of 3.0, or better, with no HSS course grade less than "C", will be offered admission to the HSS pre-graduate program.

### Required General Education Courses:

Select 27 quarter hours from the following areas to include at least one course from each of the four areas.

#### Science and/or Mathematics

PSY 121, Statistics, is required. Courses to be selected from: astronomy, botany, zoological and biomedical sciences, chemistry, physics, physical science, geological sciences, or any course in the Mathematics Department EXCEPT 101 and 320. PSY 121 is also considered a math course.

#### Comparative Arts and/or Philosophy

Possibilities include any courses in the Department of Philosophy: School of Comparative Arts; HUM 107, 108, 109, 307, 308, 309; theater history courses; art history courses; art courses EXCEPT for ART 360, 461, 462; School of Music courses EXCEPT for music education courses and music therapy courses; AAS 101.

Social Science — Possibilities include anthropology, economics, geography, political science, history, sociology, or social welfare; AAS 106, 254, 350, 360, 440, 442, 490N.

#### English and/or Foreign Language

Freshman and junior English composition courses taken to satisfy the University English composition requirement (see English Composition Requirement in the Graduation Requirements section of this catalog) may be used toward completion of

these hours. Other possibilities include all English courses EXCEPT ENG 450A and 450B; and foreign language courses EXCEPT ML 410 and 445; HUM 107, 108, 109, 307, 308, 309 (these humanities courses may NOT count toward the General Education Requirements in both the English and/or foreign language field AND the comparative arts and/or philosophy field).

If one course in each of the above fields does not add up to a total of 27 quarter hours, then a student must elect sufficient hours in one or a combination of the above areas to bring the total hours in general education to 27 quarter hours.

Psychology:	
EDEL 200 Studies of Children .....	4
EDEL 200L Clinical Field .....	1
LING 350 Intro to Gen. Linguistics .....	5
OR	
PSY 307 Psycholinguistics .....	4
OR	
LING 275 Intro to Lang. and Culture .....	5
PSY 101 Gen. Psych. ....	5
PSY 332 Abnormal Psych. ....	4
OR	
PSY 233 Psych. of Personality .....	4
OR	
PSY 310 Motivation .....	4

### Professional Education:

EDCI 275 Learning Process in the Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDCE 410 Human Relations .....	3
EDCI 401 Advanced Field Experience/Urban .....	2
EDEL 311 Teaching of Reading in Elementary School .....	4
EDEL 311L Teaching of Reading Elementary Sch./Field .....	1
EDSP 270 Classroom Management I .....	3
EDSP 271 Intro to Educ. of Excep. Child and Youth .....	3
OR	
PSY 376 Psy. Dis. of Child .....	4
EDSP 474 Intro to LD. ....	4

### Major Requirements:

HSS 107 Voice & Articulation .....	2
HSS 108 Intro to Speech Disorders .....	5
HSS 209 Phonetics .....	4
HSS 213 Anat. and Neurology of Speech .....	4
HSS 240 Professional Orientation .....	2
HSS 250 Speech and Hearing Sciences .....	4
HSS 279 Basic Manual Communication .....	3
HSS 310 Language Development .....	5
HSS 318 Articulation Disorders .....	4
HSS 320 Dis. of Phonation and Fluency .....	3
HSS 341 Speech/Language Practicum .....	2
HSS 370 Basic Audiology .....	4
HSS 372 Intro to Aud. Pro. ....	1
HSS 422 Diagnostics .....	3
HSS 442 Senior Speech/Language Practicum .....	2
HSS 444 Disorders of Language .....	3
HSS 471 Auditory Rehabilitation .....	5

### Additional Requirements:

One course in gerontology: select from HSS 300, SW 381, or SOC 334 (4 credits).

One course in computer science or computer application: recommended courses are available from HSS undergraduate coordinator.

### Multihandicapped

Students must also complete Ohio University's program of General Education (see General Education Requirement in the Graduation Requirements section of this catalog) and are urged to consult with their advisors to plan to meet both sets of requirements.

### Required General Education Courses:

#### Humanities: 5-8

Five to eight hours of humanities are required. Possible courses include any combination of the following: comparative arts, art history, great books (HUM 107, 108, 109, 307, 308, and 309), philosophy, art (except ART 360, 461, 462), music (except for music education and music therapy courses; no more than three one-hour participation courses would be acceptable), theater history courses.

#### Natural Sciences: 5-8

Five to eight hours of natural sciences are required. Possible courses include any combination of the following: botany, zoological and biomedical sciences, physics, geological sciences, chemistry, or physical world. One of the courses taken must contain a laboratory component.

#### Social Science: 5-8

Five to eight hours of social sciences are required. Possible courses include the following: anthropology, economics, economic education, geography, political science, history, sociology, or social welfare.

#### Psychology: 10

PSY 101 General Psychology ..... 5  
And 5 hours from the following: PSY 121, 231, 233, 241, 304, 310, 312, 315, 332, 336; or EDCE 410.

INCO 101 or 103 Fund/Pub. Spkg. .... 4

#### English:

ENG 151, 152, or 153 and ENG 308J ..... 9

#### Hearing and Speech Therapy: 8

HSS 108 Intro to Speech Disorders ..... 5  
HSS 378 Sign Language ..... 3

#### Math:

MATH 120 ..... 4

#### Music: 6

MUS 160 Music Fundamentals ..... 3  
OR  
MUS 282 Music Therapy Activities ..... 3

#### Art: 3-6

ART 360 Art for Elem. Tchr. .... 6  
OR

HREC 251 Art and Nature Crafts ..... 3  
OR

Approved elective

#### Health: 7

HLTH 202 Hlth Sci and Lifestyles ..... 4  
HLTH 227 First Aid ..... 3

#### Recreation: 3-4

HREC 250 Recreation Leadership ..... 3  
OR

Approved Phys. Ed. Course ..... 4

Tier III ..... 4

### Major Requirements:

#### Block I (Freshmen and Sophomores)

EDCI 275 Lrng. Process in Classroom .....	5
OR	
PSY 275 Educational Psy. ....	4
EDSP 160 Field Exp. Spec. Educ. ....	1
EDSP 271 Intro Ed. Except. Child .....	3
HECF 160 Intro Child Development .....	4
OR	
EDEL 200 Studies of Children .....	4

#### Block II (Sophomores)

EDM 480 Intro to Ed. Media .....	4
EDSP 260 Field Exp. in Spec. Educ. ....	2
EDSP 270 Classroom Mgt. ....	3
EDSP 272 Intro to Educ. of MR .....	3
EDSP 373 Curric. & Mat. for Exceptional Learner .....	4

**Block IIIB (Juniors)**

EDSP 361 Field Exp. in Spec. Educ. ....	3
EDSP 374 Lang. Dev. and Adapt. for the Exceptional Learner .....	4
EDSP 377 Career & Voc Ed. ....	3
EDSP 473 Nature and Needs of Persons with Multihandicaps .....	4
EDSP 485 Diag. & Eval. Sp. Ed. ....	3

**Block IVB (Juniors)**

EDSP 371 Tchng. Presch. Hand. ....	3
OR	
EDCI 492M Tchng. Daily Living Skills .....	3
EDSP 461 Field Exp. Sp. Ed. ....	3
EDSP 475 Methods/Mat. Multihandicapped .....	4
EDSP 477 Comm. w/Parents & Prof. In Sp. Ed. ....	4
HPES 335 Adapted P.E. for Sp. Ed. ....	3
EDM 332 Micro App in Ed. ....	4
EDSP 355 Micro in Sp. Ed. ....	4
EDCI 480 Tchr. Sch. to Soc .....	3
OR	
EDEL 460 Child & Curr .....	4
EDCI 401 Adv. Field Exp. — Urban .....	2

**Recommended Professional Electives:**

EDSP 378 Sheltered Workshop .....	2
HECF 361 Prin. of Presch. Guid. ....	3

**Professional Laboratory Experience:**

EDPL 461 and 462 Student Teaching .....	13
EDPL 465 Student Teaching Seminar .....	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be taken. For example, anyone doing student teaching during any of the three quarters of the school year 1992-93 should apply by December 1, 1991. For further information contact the Field Experiences Office. Students must complete Block IVB before entering student teaching.

**Minor Area of Concentration: 14-15**

Students are required to complete a 14-15-hour area of concentration in one related area outside of the College of Education. Common minors are art, early childhood, home economics, music, physical education, political science, psychology, recreation therapy, residential services, sheltered workshops, social work, sociology, and speech pathology. Students may NOT count courses taken to complete the General Education Requirements in humanities, natural sciences, social sciences, and psychology toward fulfillment of the minor area of concentration.

**Early Childhood Special Education (ECSE)**

*(New teacher certification under review)*

A new program in Early Childhood Special Education currently is under review by the Ohio State Department of Education. Upon approval, special education majors will be able to: (A) pursue a dual major in either Developmentally Handicapped/ECSE, or Multihandicapped/ECSE; or (B) add ECSE as an additional area of special education certification. For additional information, contact the Special Education Program area.

**STUDENT TEACHING**

Successful student teaching represents the culmination of the program of professional preparation; it is a requirement for the Bachelor of Science degree in education for persons pursuing programs which are designed to result in eligibility for teacher certification. No candidate will be considered for recommendation for a teaching certificate who has not received passing scores on the National

Teacher's Exam, and has not completed, under the supervision of Ohio University, at least 16 quarter hours of observation, participation, student teaching with grades of C or above, and seminar.

**VOCATIONAL EDUCATION**

The teacher education program in vocational education provides alternative certification programs for those individuals who have had qualifying vocational experiences, either prior to collegiate instruction or who wish to update present skills to qualify for the Ohio Vocational Teaching Certificate.

The program requires extensive study in vocational education as required by the State Department of Education, Division of Vocational and Career Education. Contact: Terry Harvey, The Ridges, 107 Adm. Bldg., phone 614-593-1460.

**APPLICATION**

It is the responsibility of the student to enter an application for student teaching in the Office of the Director of Field Experiences not later than December 1 preceding the academic year in which a student teaching assignment is desired.

**SCHEDULE, HOUSING, TRANSPORTATION, AND ASSIGNMENTS**

Students experience the complete range of the teacher's activities in full-time student teaching assignments for one quarter. All students must plan carefully during the first three years of college to provide for a completely free quarter to engage in full-time student teaching. Majors in elementary education and majors in secondary academic areas and special fields will normally be assigned to student teaching during one of the quarters of their senior year.

The assignment of each student to a school is the responsibility and prerogative of the director of Field Experiences. Students will be assigned to one of our existing centers which are in the following areas: Athens, Belmont County, Chillicothe, Ironton-Portsmouth, Lancaster, and Zanesville.

Students must secure their own housing and provide their own transportation to their assignments. Privately owned cars will be needed except by students assigned in metropolitan centers where public transportation is available. Students teaching assignments in the Athens area are made within a commuting radius of 50 miles. The University assumes no responsibility for the transportation of students.

**PREREQUISITES FOR STUDENT TEACHING**

Applicants are evaluated for admission to student teaching in terms of the prerequisites described in this section. Any exceptions are the responsibility of the director of field experiences. The student teaching applicant is responsible for meeting the appropriate prerequisites prior to the opening of the quarter designated for student teaching on his or her application. In addition to the prerequisites detailed in this section, applicants in health, music, physical education, home economics, and hearing and speech therapy must have approval of the appropriate department head.

Enrollment in student teaching is open only to Ohio University degree candidates or to degree holders who are completing Ohio certification requirements and who will be eligible for Ohio University's recommendation for an Ohio certificate upon the completion of student teaching.

**Criteria for Admission** (requirements must be completed by the time a student begins student teaching, not at the time of application):

1. General requirements
  - a. Completion of at least two quarters (30 quarter hours) of residence work at Ohio University. Transfer students must complete at least one-fourth of the preparation in the principal teaching field at Ohio University.
  - b. Completion of at least 135 quarter hours with an accumulative grade-point average of 2.5.
  - c. Completion of all requirements to be admitted to advanced standing in professional education (Stage II) at least one quarter prior to starting student teaching, including passing scores on PPST.
  - d. Completion of junior-level English composition requirement.
  - e. Completion of a significant portion (at least 75 percent) of the general education portion of the teacher education program the student is pursuing and all of the University General Education Tier I and Tier II requirements.
2. Specific requirements for elementary education
  - a. Completion of the following courses with an accumulative g.p.a. of 2.5 with a minimum grade of C in each course:
    1. EDCI 275 or PSY 275
    2. EDEL 200, 310, 311, 321, 330, 331, 340, 350, 372
    3. EDSP 271
    4. EDEL 200L, EDSP 160, EDCI 401
    5. EDEL 310L, 311L, 321L, 330L, 331L, 350L
  - b. Completion of ART 360, MUS 161, and HPES 270.
3. Specific requirements for kindergarten certification
  - a. Completion of all special requirements for elementary education (see 2 above).
  - b. Completion of the following course with a minimum grade of C:  
EDEL 306
  - c. Satisfactory completion of one full quarter of student teaching in elementary education.
4. Specific requirements for special education
  - a. Completion of all courses in blocks I, II, III, IV, and V with an accumulative g.p.a. of 2.5 with a minimum grade of C in each course.
  - b. Completion of all field experience courses required in blocks I, II, III, IV, V and EDCI 401 with an accumulative g.p.a. of 2.5 with a minimum grade of C in each.
  - c. A positive recommendation from the faculty members coordinating blocks III, IV, and V based upon review by all faculty teaching in each block.
5. Specific requirements for secondary education
  - a. Completion of the following courses with an accumulative g.p.a. of 2.5 with a minimum grade of C in each:
    1. EDCI 275 or PSY 275, EDSE 250, 270, 351, 420
    2. EDM 480A and specific methods courses
    3. EDSE 250L, 270L, 420L, EDCI 401
  - b. Completion of a major portion (at least three-fourths—75 percent) of the work in each of the teaching fields in which the student wishes to be certified.
  - c. An accumulative g.p.a. of 2.5 must be attained in each field for which certification is sought.
6. Specific requirements for hearing and speech therapy.
  - a. Completion of the following courses with an accumulative g.p.a. of 2.5 with a minimum grade of C in each:
    1. EDCI 275 or PSY 275
    2. EDSP 271 or PSY 376
    3. EDSP 270, 474
    4. HSS 442
    5. EDEL 311, 311L

6. EDCE 410

7. EDCI 401

b. Completion of a bachelor's degree in hearing and speech therapy and HSS 643.

c. A favorable recommendation from the clinical coordinator in hearing and speech science.

## TEACHING CERTIFICATES

A student who plans to teach in Ohio makes application for a teaching certificate at the time of application for graduation.

Applications may be obtained from Student Services, McCracken Hall. The teaching certificate is issued by the State Department of Education and qualifies the student to teach the subjects indicated on the certificate.

Completion of requirements for graduation and of the professional courses required for certification does not ensure that the individual will be recommended for certification. Instructors in various courses, and especially in courses in education and student teaching, will evaluate a student's fitness for the teaching profession in ways other than observation of academic performance in the classroom. Limitations which might impair the individual's usefulness as a teacher in the public schools will be made a part of the student's record. When the student applies for certification this record will be examined and the question of his or her fitness for teaching will be given further consideration. Grades of C, or above, are required for recommendation, as well as passing scores on the National Teacher's Exam.

Students who are not planning to teach in Ohio should inform themselves about the requirements specified by the departments of education of the states in which they expect to teach. New standards will require an exit examination and an entry year of intern experience prior to receiving the standard certification. (Details will be available at a later date.)

## RECIPROCITY

Ohio now participates in the Interstate Agreement on Qualification of Educational Personnel and has already entered into an implementation contract with the following states:

Alabama	New Hampshire
California	New Jersey
Connecticut	New York
Delaware	North Carolina
District of Columbia	Oklahoma
Florida	Pennsylvania
Hawaii	Rhode Island
Idaho	South Dakota
Indiana	Utah
Kentucky	Vermont
Maine	Virginia
Maryland	Washington
Massachusetts	West Virginia
Nebraska	

## MAJOR FIELD OF SPECIALIZATION

To be recommended for certification by Ohio University, the student's level of preparation in the major area of specialization must correspond with the outline on the preceding pages, even though these requirements in many instances exceed those shown in the state certification regulations.



**SECOND TEACHING FIELD**

The level of preparation in the second certifiable field (minor) must equal or exceed requirements shown in the regulations of the Division of Teacher Education and Certification of the State Department of Education. Curriculum guides for minors are available from Student Services, McCracken Hall. The following minors have been approved:

Biological science  
 Bookkeeping-basic business  
 Chemistry  
 Earth science  
 Economics  
 Educational media  
 English  
 French  
 General science  
 German  
 Health education  
 History  
 Journalism  
 Latin  
 Mathematics  
 Physics  
 Physical education  
 Political science  
 Spanish  
 Speech

**Endorsement.** An endorsement of a standard certificate may be issued in the following areas:

- A. Driver Education ..... 9 quarter hours
- B. Educational Media ..... 30 quarter hours
- C. Reading ..... 18 quarter hours
- D. Typing/Keyboarding ..... 9 quarter hours

**Validation.** A validation of a standard certificate may be issued in the following areas:

- A. Pre-Kindergarten (Validation limited to a standard kindergarten-primary, elementary, home economics, or special certification for education of the handicapped ..... 30 quarter hours
- B. Other teaching validations approved by the State Board of Education.
- C. Gifted Education

**PLACEMENT**

The Office of Career Planning and Placement, located in Lindley Hall, offers assistance to undergraduate and graduate students and alumni of the University who are seeking educational positions.

Information about available teaching and administrative positions in the public schools, as well as openings in education, student personnel, home economics, counselor education, industrial arts, and physical education departments of colleges and universities of most states and many foreign countries, is disseminated through the office.

# College of Engineering and Technology

T. Richard Robe, *Dean*  
 Joseph E. Essman, *Associate Dean*  
 Pamela Parker, *Assistant Dean*  
 Albert R. Squibb, *Assistant Dean*

## THE COLLEGE

The College of Engineering and Technology offers curricula leading to the Bachelor of Science degree through the departments of chemical, civil, electrical and computer, industrial and systems, and mechanical engineering, as well as in airway science and industrial technology. Engineering curricula are focused on the engineering profession in which a knowledge of the mathematical and natural sciences, gained by study, experience, and practice, is applied to develop ways to economically utilize the materials and forces of nature for the benefit of humankind and the environment. Graduates have both the theoretical and practical training to begin professional careers or continue advanced work at the graduate level. Program flexibility is provided through technical electives so that the student may concentrate his or her studies in a chosen area within the department, or alternately use these electives in other areas. All engineering curricula are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board of Engineering and Technology (ABET).

The airway science curriculum, approved by the Federal Aviation Administration (FAA), prepares students for careers in aviation.

The industrial technology curriculum combines courses in general education, math and computer science, physical science, and management with "hands-on" manufacturing courses to prepare graduates for technical/management positions in manufacturing industries. The Industrial Technology Program is accredited by the National Association of Industrial Technology (NAIT).

Endowments totaling over \$13 million (principally due to the late Dr. C. Paul Stocker, a distinguished alumnus, and his wife, Beth K. Stocker) provide unique opportunities. Visiting professorial chairs, scholarships, advanced research equipment, and excellence in departments within the college are provided by these generous endowments.

With careful planning a student may, in addition to the Bachelor of Science degree from this college, obtain a second degree from the College of Arts and Sciences, the College of Business Administration, or the College of Fine Arts. (See A Second Bachelor's Degree in the Graduation Requirements section.)

In addition to the financial aid program sponsored by the University, the College of Engineering and Technology and

its departments have separately funded scholarships. Students applying for scholarships through University channels are considered for both University and separately funded scholarships. The college also has established a student loan fund for upperclass students needing assistance. Information on this program is available in the dean's office, Stocker Center.

Projections are that the number of bachelor's graduates in engineering in the next several years will average below the nation's needs. This would include students who transfer into four-year engineering baccalaureate programs after completing two-year engineering technician programs. The nation's needs for technical expertise to help solve our energy, transportation, productivity, food, housing, and balance-of-payment problems would be prime factors for this projected need-to-supply ratio.

## ADMISSION TO ENGINEERING AND TECHNOLOGY PROGRAMS

Upon admission to Ohio University, an entering freshman who has an objective of obtaining a degree in engineering, airway science, or industrial technology may request direct entry into the College of Engineering and Technology. In addition to the general requirements for admission to Ohio University, there are special requirements for all applicants seeking admission to one of the engineering degree programs.

In general, direct entry into a regular engineering degree program of the College of Engineering and Technology depends upon the qualifications and preparation of the applicant. The criteria listed below are the minimum preparation recommended for all engineering degree programs. However, when other considerations tend to discount low academic grades or college aptitude test scores, direct entrance may be requested if there is other persuasive evidence of both the capability and motivation to successfully undertake an engineering program.

Students entering as freshmen and wishing to obtain a degree in industrial technology may request direct entry into the College of Engineering and Technology. There are no additional requirements above the general University

requirements listed in this catalog.

Students may request direct entry into the Airway Science Program. Because of the nature of the program, only a limited number of applicants are accepted into this program. Those not accepted may enter the University for possible transfer into the program at a later date; however, there is no guarantee that space will be available.

## FRESHMAN APPLICANTS

### Direct Entry into Engineering Programs

Recent high school graduates or transfer students, who have earned fewer than 30 quarter hours (or 20 semester hours) of credit\* at Ohio University or another accredited collegiate institution, seeking direct entry admission to the College of Engineering and Technology should have the minimum credentials (or the equivalent) indicated on the Entrance Chart below.

\*Semester hours can be converted to equivalent quarter hours by multiplying by a factor of 1.5 (a semester hour equals 1.5 quarter hours).

### Entrance Chart

Applicants Should Meet One of Two Criteria Below  
(Minima For Direct Entry)

High School Subjects	CRITERION I		CRITERION II	
	Units*	High School Record	Test Score** (minimum)	
Mathematics***	3	Upper	ACT	SAT
Chemistry****	1	1/2	24	1,000
Physics****	1	of class		
English	4			

\*The unit is equivalent to one academic year.

\*\*ACT composite score or SAT combined verbal and mathematics score. (80th percentile or above in the math portion is strongly recommended.)

\*\*\*This must include a minimum of Algebra I and Algebra II and geometry. A minimum of one half year of trigonometry is required, which may be part of Algebra II.

\*\*\*\*Applicants with otherwise strong qualifications may be admitted with one unit of chemistry or physics, and the missing area completed during the first year. For these cases, it will likely require more than the standard 12 academic quarters to complete the degree program.

### Applicants Not Having Minimum Preparation for Direct Entry (Engineering Programs)

Students not meeting the above minimum preparations may enter the Pre-Engineering Program in University College to develop their abilities in the areas of mathematics, chemistry, and English prior to applying for entry into the College of Engineering and Technology. Following this preparation, entry into the College of Engineering and Technology can be accomplished by earning a grade-point average of 2.0 or above in each of the following groups of courses and by meeting a minimum overall grade-point average of 2.0 on a four-point scale.

1. MATH 263A, 263B
2. CHEM 121, 122 or CHEM 151, 152 as required by intended major
3. Completion of the freshman English requirement
4. ET 280

A student entering the Pre-Engineering Program in the University College with an intended engineering major, but who does not meet minimum preparation specified (Direct Entry into College of Engineering and Technology) will be identified as a pre-engineering major in the University College and will be assigned an engineering advisor. Students entering into one of the engineering programs in this

manner may require more than the usual four academic years to complete the degree requirements.

A student with a record including mathematics and science courses beyond the above minimum required courses will be evaluated on the basis of his or her accumulative record and upon individual grades in English, mathematics, chemistry, physics, and engineering-related courses which the applicant may have completed at the time application is made for admission to the College of Engineering and Technology.

## APPLICANT FROM ANOTHER COUNTRY

Admission of applicants from other countries will be based on official transcripts, pertinent documentation of all secondary and post-secondary work, and other evidence as required by the University and College of Engineering and Technology.

Evaluation of work and admission of applicants will be performed by the University examiner and the College of Engineering and Technology.

Applicants from foreign countries must meet the criteria given in this catalog under International Student Applicant in the Admission and Fees section.

## TRANSFER STUDENTS

Qualified transfer students are accepted within the guidelines set forth below. Each applicant will be considered on an individual basis, and entrance into the College of Engineering and Technology will be based on his or her qualifications. Transfer credits applicable to a given engineering degree are determined by the college and the program department.

Students must earn a minimum of 36 quarter hours at Ohio University, applicable toward their degree after transferring into one of the college's degree programs.

Applicants for the engineering programs who have earned fewer than 30 quarter hours of credit are required to meet the minimum preparation designated for entering freshmen.

In general, transfer applicants into one of the engineering programs from other universities and colleges will be evaluated based on an applicant's accumulative grade-point average on all college work attempted and upon individual grades in English, mathematics, chemistry, physics, and engineering-related courses which the applicant may have completed at the time application is made.

Transfer applicants for the industrial technology and airway science programs will be evaluated on the applicant's accumulative grade-point average and specific courses completed.

Applicants who have left other institutions for academic or disciplinary reasons will not be considered for admission until after two calendar years following the date from which the applicant has been dropped from another university or college.

Guidelines for the entrance of transfer students into the College of Engineering and Technology follow.

### Transfer from Other Universities or Colleges Outside Ohio University

Applicants from other accredited collegiate institutions are expected to have the minimum preparation set forth for entering freshmen, and to meet the University's transfer policy. Those applicants eligible to transfer into the University but who do not meet the criteria specified for entering freshmen may be considered for admission provided they have met the following criteria: (1) they have

demonstrated abilities in mathematics and science by earning a minimum of 2.5 on a four-point scale in all mathematics and science courses attempted at the institution from which they are transferring; and (2) their overall grade-point-hour ratio is above the acceptable minimum level.

Applicants with credentials equivalent to those of freshmen who entered the University College (see FRESHMAN APPLICANTS) and have demonstrated abilities in mathematics, natural science, physical science, and English may be admitted to the engineering programs.

Applicants from two-year institutions following recognized and accredited University Parallel Programs will be evaluated according to the conditions stated for accredited four-year institutions.

Students transferring into one of the engineering degree programs from two-year institutions following an associate degree program in technology must have a minimum grade-point average of 3.0 on a 4.0 scale and indicated abilities in the mathematics and science areas. Transfer courses will be evaluated to determine their applicability toward degree requirements.

### ***Transfer Students from Other Colleges Within the University***

Students transferring from other colleges within the University are expected to have the same preparation as entering freshmen or to have attained the equivalency of those freshmen who entered the University College and completed the specified mathematics, natural science, physical science, and English courses (see FRESHMAN APPLICANTS) with the specified grade-point average.

Transfer students not meeting the above criteria will be evaluated on an individual basis; however, they must have earned a 2.0 average or better on a four-point scale in all mathematics and science courses attempted.

### ***Students Relocating from the Regional Campuses***

Students relocating from the regional campuses who have not been admitted to the College of Engineering and Technology as entering freshmen are required to meet the same criteria set forth for students transferring from other colleges within Ohio University.

## **ACADEMIC REQUIREMENTS**

### **Advising and Program Planning**

The student should indicate the choice of discipline on the official application for admission to the University, assuring the assignment of a faculty advisor in the department of his or her choice. If a student has not decided upon the specific major within the college (area of concentration code #0910), the assistant or associate dean or the appropriate designate will serve as his or her advisor until a choice of major is made. Students in the engineering programs with demonstrated abilities in mathematics and science can, with approval of the dean's office, readily change their majors within the college and are eligible to take courses in all colleges of the University.

Students not requesting direct entry into the College of Engineering and Technology, or not possessing the minimum preparations as indicated above, will be enrolled in the pre-engineering major (code #1105) in University College. These students should read the statements included in the University College section of this catalog. Students enrolled in the pre-engineering major will be

advised by a selected number of engineering faculty designated by the associate or assistant dean. For further information, students should contact the various department chairs or the associate dean.

Course requirements for the freshman year in each of the engineering departments within the College of Engineering and Technology are similar (the mechanical engineering freshman program is slightly different). Hence, while it is desirable for an engineering student to indicate a specific major field of study earlier, a student could defer a decision on a specific major field of study until the beginning of the sophomore year.

After completing one of the engineering degree programs in the College of Engineering and Technology, the engineering student is qualified to seek, by examination, registration as a professional engineer from the Board of Registration for Professional Engineers of the state where he or she intends to practice. It is to the student's advantage to take the examination during the spring or fall quarter closest to the expected time of graduation or as soon after graduation as possible.

Graduate programs leading to the M.S. degree are available in all of the engineering programs. In addition, graduate work leading to the Ph.D. degree is available in chemical engineering, electrical engineering, and in an interdisciplinary program in integrated engineering. These programs are described in detail in the *Graduate Catalog* issued by the Office of Graduate Student Services.

## **DEGREE REQUIREMENTS**

A candidate for a degree in the College of Engineering and Technology must satisfy all of the curriculum requirements which are applicable toward a degree of his or her particular field as specified on the following pages. Students must earn a minimum of 36 quarter hours applicable toward their degree after entering one of the degree programs. In addition he or she must satisfy the following:

1. A student must have a 2.0 (C) average on all courses attempted which are applicable toward a degree.
2. He or she must have a 2.0 (C) average on all courses attempted in the College of Engineering and Technology which are applicable toward a degree.
3. He or she must have a 2.0 (C) average on all courses attempted in the major area of study which are applicable toward a degree.
4. A student must successfully complete a course by the end of the third enrollment in that course.

Averages will be computed on final hours and points in repeated courses, if any.

### **Requirements for Continuing in the College**

A student enrolled in the College of Engineering and Technology continues in his or her program unless there is demonstrated weakness in the mathematics, science, and engineering-related subjects, which would indicate his or her inability to meet the academic requirements of the program. The associate or assistant dean and department chair will make decisions concerning cases of this nature, and the student will be notified accordingly.

In addition to the above overall performance, the specific requirements listed under Deficiency Points and Repeated Courses must be met.

### **Deficiency Points**

A student enrolled in the College of Engineering and Technology continues in his or her program in a normal manner, provided:

1. He or she maintains an average of 2.0 (C) or better in all hours attempted at Ohio University which are applicable toward a degree.

2. He or she maintains an average of 2.0 (C) or better in all hours attempted in the College of Engineering and Technology that are required for graduation (including technical electives).

3. He or she maintains an average of 2.0 (C) or above in all courses attempted in his or her major area of concentration that are applicable toward the degree.

Averages in any of these categories below 2.0 (C) result in deficiency points and probation. The academic record of a student who is on probation or who acquires deficiency points in any quarter is reviewed by the student's department chair and by the associate or assistant dean of the college to determine if such student may continue in the program. A student who is placed on University probation at the end of any quarter must earn a minimum of nine quarter hours of credit with a 2.0 (C) or better average in his or her next quarter of attendance or be dropped from the University. These credits must be in courses directly applicable to the degree requirements.

In the subsequent quarter, if the student's academic progress is such that he/she is not eligible to be removed from probation, the student's academic record will be reviewed to determine if he/she should be continued. The number of times a continuance may be granted is limited to three; thus, there is an absolute limit of four consecutive quarters on probation. Although the maximum number of times a student may be continued on probation is four, a student on probation may be dropped at the end of any quarter of poor academic performance.

Students who are placed on college or departmental probation at the end of any quarter must receive a 2.0 (C) average or better in subsequent quarters in their engineering and technology and/or major courses or they will be dropped from the College of Engineering and Technology. In addition, deficiency points in the engineering and major subjects normally must be removed within two quarters. Students on probation should discuss the matter with their academic advisors, department chairs, and/or the associate or assistant dean of the college. Students who are dropped from the University or from the college may appeal the decision by contacting the associate or assistant dean of the college.

Normally, a petition for reinstatement will not be considered until 12 months after the student is dropped.

### Repeated Courses

A student in the College of Engineering and Technology must succeed in a required program course by the third time he or she enrolls in the course. If the student does not meet this requirement, he or she will be dropped from his or her program. Success is a passing grade or, in those courses in which a grade of C or above is required to continue a sequence, a minimum grade of C is necessary for success.

This policy is effective fall, 1982, for all students. Repeated courses prior to fall, 1982, will not be considered in the count.

### Humanities-Social Science Electives

Each major departmental curriculum includes an extensive program of study in the social sciences and humanities. The courses listed below have been identified as those which meet the generally accepted definitions of humanities and social sciences as required by ABET curricular requirements. Students should be aware that some of these courses may satisfy General Education Requirements, and selections should be made with this in mind.

Although these lists may not be inclusive, any deviations must be approved by the Dean's Office. Without *prior approval*, courses selected which are not on this list will not be applicable towards the humanities and social science requirements in the College of Engineering and Technology.

Only *formal* courses are acceptable unless *prior* written approval is given by the Dean's Office. Courses in selected topics, independent study, etc., are not acceptable without this prior approval. Courses in education, business, or other professional areas, or that are remedial in nature, or skills oriented, are not acceptable.

During the first quarter of attendance, students and their advisors should develop a plan of courses, consistent with college and department guidelines, that fulfills an objective appropriate to the engineering profession. The course plan, which becomes part of the student's file, should provide both *breadth* and *depth* through a selection of interrelated courses. The plan should include two sequences of related courses, one in each area, with an advanced level course (courses requiring a prerequisite of one in the same area, or 300-level courses in the same area which are not dual-listed with a lower-numbered course) in each sequence. Students should check with their departments for additional information on these requirements. For industrial technology majors, courses selected must be from three different areas.

Students should check each departmental listing in this section of the catalog for specific requirements.

### Humanities

- a. Art (ART 100, 439)
- b. Afro-American Studies (AAS 101, 106, 110, 150, 210, 211, 250, 310, 315, 316, 317, 350, 355, 356, 359)
- c. Art History (AH), *except* 350
- d. Classical Archaeology (CLAR 201, 203, 352)
- e. Comparative Arts (CA), *except* 350, 360J
- f. Dance (DANC 170, 351, 352, 353, 370, 471, 472, 473)
- g. English (ENG), 200 level or above, *except* 280, 305J, 307, 308J, 309A, 309B, 319J, 350, 393, 394, 395, 450A, 450B, 455, 457, 496)
- h. Foreign Language: 200 level or above; may not be a primary language of the student.
  - i. Foreign Literatures in English (CLNG: FL: ML 250A-C)
  - j. HUM 107, 108, 109, 117, or 307, 308, 309
  - k. History (HIST 121, 122, 123, 314A-F, 328, 329A-C, 330, 331, 351, 352, 353A-B, 354, 356A-C, 357, 370, 389)
  - l. History of Theater (THAR 270, 271, 272)
- m. Music History and Literature (MUS 120, 124, 125, 321, 322, 323, 421A-F, 427, 428)
- n. Philosophy (PHIL), *except* 120, 301J, 360J, 320, 420, 422, 423
- o. THAR 470, 471, 477
- p. Women's Studies (WS 100)

### Social Science

- a. Afro-American Studies (AAS 135, 202, 220, 225, 235, 254, 340, 341, 345, 360, 364, 368, 370, 380, 430, 431, 432, 440, 460, 482)
- b. Anthropology (ANTH), *except* 201, 356J, 492, 496
- c. Economics (ECON), *except* 380, 381, 385, 482
- d. Engineering and Technology (ET 320, 350)
- e. Geography (GEOG), *except* 101, 260, 271, 277, 301, 302, 303, 304, 311, 312, 313, 314, 324, 330, 350, 353, 360, 361, 365, 375J, 380, 405, 411, 420, 421, 447, 462, 466, 468, 471, 474, 475, 476, 477, 478, 479, 485, 486, 494.
- f. History (HIST), *except* 301J, 396J, 496 and those listed in k. under humanities
- g. Interpersonal Communication (INCO) 351, 352, 353
- h. International Studies (INST 103, 113, 121, 350)
- i. Linguistics (LING), *except* 445, 451, 452, 453, 460, 480, 481, 482, 483
- j. Political Science (POLS), *except* 482 and 483
- k. Psychology (PSY), *except* 121, 226, 241, 275, 301, 312, 314, 315, 321, 327, 351
- l. Social Work (SW), *except* 190, 380, 381, 383, 385, 490A-C
- m. Sociology (SOC), *except* 351, 352, 356J, 450
- n. Women's Studies 400

## English Requirement

In addition to the curricular requirements as stated on the following pages for departments in engineering and technology, all students must also satisfy the University curricular requirements in English.

## General Education Requirement

Students should plan their curricula to fulfill the University General Education Requirements, as described under the Graduation Requirements section of this catalog.

## Pass/Fail Option

Students in the College of Engineering and Technology may elect to take courses on a pass/fail basis within eligibility requirements as stated in the Credit and Grading section of this catalog.

## Repeating a Course

When a course is repeated, both grades continue to be used to determine the accumulative point-hour ratio until the student applies for and completes a repeated course form available from the office of the dean. A course may not be repeated after an advanced course in the same field has been passed if the course that the student desires to repeat was a prerequisite for the advanced course.

Course Credit by Examination or correspondence may not be used to earn credit in a course required for graduation which the student has previously failed.

## COOPERATIVE EDUCATION

Cooperative education opportunities and internships are available in the departments of chemical, civil, electrical and computer, industrial and systems, and mechanical engineering, as well as in industrial technology. Students participating in a cooperative education experience alternate working in selected industries and enrolling in a full-time academic program on campus. Students participating in this plan will require more than the normal four years to complete degree requirements.

Participation in cooperative education provides a student with valuable career experiences. The alternative work/study periods allow students to integrate classroom theory with practical applications. It also provides students with opportunities to earn money to assist them in financing their education. Students can participate in summer internships.

Students interested in these programs should contact the cooperative education coordinator (189 Stocker).

## EXPLORATORY (UNDECIDED) ENGINEERING STUDENTS

Each year a substantial number of new students entering the College of Engineering and Technology do so without having a firm commitment to any one of the engineering programs offered by the college. The schedule below is suggested for these students, and will meet the first-term requirements of all of the engineering departments.

### Freshman

<i>Fall</i>	
CHEM 151 General Chem. ....	5
ET 280 Engr. and Tech. - An Overview .....	4
MATH 263A Analytic Geom. & Calc. ....	4
Freshman English requirement*	5

### Winter

CHEM 152 General Chemistry .....	5
INCO 103 or IT 101** .....	4
MATH 263B Analytic Geom. & Calc. ....	4
Other** .....	3 to 5

### Spring

CHEM 123 or 153* General Chemistry .....	4 or 5
ET 181 Computer Methods in Engr. ....	4
MATH 263C Analytic Geom. & Calc. ....	4
Other** .....	7 or 9

Faculty advisors will assist the undecided student in choosing satisfactory electives.

\*As required by the department.

\*\*All departments will accept INCO 103 (Public Speaking) to fulfill the speech requirement and some require IT 101 (Engr. Drawing I). These should be taken during the first year. Approved social science and/or humanities electives can also be scheduled for this term. ET 181 required of all engineering students.

## DEGREE PROGRAMS

### BACHELOR OF SCIENCE IN AIRWAY SCIENCE

(Major code #7258)

The program for the Airway Science degree meets the guidelines of the Federal Aviation Administration (FAA) and prepares students for career opportunities in commercial aviation as FAA certificated pilots and aircrew members, air traffic controllers, aviation safety inspectors, electronic technicians, and computer specialists. It is hoped that the airway science background will give students the ability to undertake roles in the total national airspace system and to progress to supervisory and managerial positions with necessary leadership and human relations skills. Additionally, this educational background should give graduates the broad knowledge base, perspective, and flexibility to accept and cope with the increasingly technical and automated environment of our national airspace system. Upon completion of the Airway Science Program, graduates' names automatically will be placed on the Federal Register.

The two-year A.A.S. degree in aviation technology is also available at Ohio University.

A course listed as *required* (R) must be included in the curriculum. A course listed as an *elective* (E) is a recommended course. It is possible to substitute courses in the curriculum as long as the minimum total credits for that subject area are maintained. Substitute courses must be drawn from the same subject area, e.g., general studies, math/science/technology, computer science, management, aviation area of concentration.

### Core Subject Areas

#### General Studies

ENG	151	Freshman Comp	(R)	5
ENG	305J	Technical Writing	(E)	4
ECON	103	Principles of Micro	(E)	4
ECON	104	Principles of Macro	(E)	4
HUM	107	Humanities	(E)	4
INCO	101	Fund of Human Comm	(E)	4
INCO	103	Fund of Public Speaking	(R)	4
POLS	101	American National Government	(E)	4
PSY	101	General Psychology	(R)	5

Minimum Hours 38

#### Math/Science/Technology

CHEM	121	Principles of Chemistry	(E)	4
GEOG	101	Elements of Physical Geog	(E)	5
MATH	113	Algebra	(E)	5
MATH	163A	Intro to Calculus	(R)	4



MATH	163B	Intro to Calculus	(E)	3
PHYS	201	Intro to Physics	(R)	4
PHYS	202	Intro to Physics	(R)	4
PSY	121	Elementary Statistics	(R)	5

Minimum Hours 34

### Computer Science

CS	120	Computer Science Survey	(R)	5
CS	220	Intro to Computing	(R)	5
CS	230	Computer Programming	(R)	5

Minimum Hours 15

### Management & Human Resource Management

HRM	420	Human Resource Mgt.	(E)	4
MGT	200	Intro to Management	(R)	4
MGT	325J	Business Communications	(E)	4
MGT	340	Organizational Behavior	(R)	4

Minimum Hours 16

### Aviation

AVN	110	Private Pilot Ground	(R)	4
AVN	240	Private Pilot Flight	(R)	4
AVN	300	Aviation Laws & Regulations	(R)	3
AVN	350	Instrument Ground	(R)	4
AVN	410	Fundamentals of Aviation	(E)	4
ISE	248	Human Factors in Aviation	(E)	4

Minimum Hours 23

### Area of Concentration

#### Aircraft Systems Management

AVN	310	Adv Aeronautics for Comm Pilots	(R)	4
AVN	320	Advance Aircraft Systems	(R)	2
AVN	340	Commercial Flight I	(R)	4
AVN	343	Commercial Flight II	(R)	4
AVN	390	Air Transportation	(R)	3
AVN	400	Commercial Flight III	(R)	4
AVN	425	Commercial Flight IV	(R)	6
AVN	435	Flight Engineer	(E)	4
AVN	440	CFI Ground	(R)	4
AVN	445	CFI Flight	(R)	3
AVN	450	Instrument Instructor Ground	(R)	3
AVN	455	Instrument Instructor Flight	(R)	3
AVN	465	CFI — Multi-engine	(R)	2
AVN	475	Aviation Internship	(E)	5
GEOG	303	Elements of Climatology	(R)	5
GEOG	304	Obs. in Meteorology & Forecast.	(R)	2
GEOG	405	Forecasting in Meteorology	(E)	4
IT	220	Aircraft Powerplants	(R)	3

Minimum Hours: 65

Tier III Elective (R) 4

Total 194

AVN 420, Commercial Single Engine and AVN 430, Multi-Engine, available for students not taking AVN 425.

Sixty hours are needed in the area of concentration. An elective from any subject area can be used if additional hours are needed. Make sure Tier II requirements are completed.

## BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

(Major code #7251)

The chemical engineering curriculum is planned so that its graduates are familiar with the techniques used in analyzing and solving engineering problems associated with the chemical and related industries (petroleum, metallurgical, plastics, pollution control, etc.). In addition, the program provides an excellent background for graduate study in engineering, science, business administration, law, or medicine.

Study in chemistry, mathematics, physics, and communication skills is emphasized. Courses in engineering fundamentals are introduced, followed by intensive work in

engineering analysis and design. Emphasis is placed upon the application of principles from many fields of study to the solving of engineering problems. Computer solutions, safety, process control theory, economics, and similar topics are stressed. Electives permit the student to pursue his or her interest in humanities, social sciences, and technical areas.

### Freshman

#### Fall

CHEM 151	5
ET 280* Engr. and Tech. — An Overview	4
MATH 263A Analytic Geom. & Calc.	4
English Composition****	5

#### Winter

CHEM 152 Fund. of Chem.	5
ET 181* Computer Methods in Engr.	4
MATH 263B Analytic Geom. & Calc.	4
Soc. Sci. or Hum.**	4

#### Spring

CHEM 153 Fund. of Chem.	5
INCO 103*	4
MATH 263C Analytic Geom. & Calc.	4
Soc. Sci. or Hum.**	4

### Sophomore

#### Fall

CHE 200 Intro. Chem. Engr.	4
CHEM 305 Organic Chem.	3
MATH 263D Analytic Geom. & Calc.	4
PHYS 251 Gen. Phys.	5

#### Winter

CHEM 306 Organic Chem.	3
ET 240 Computer Methods in Engr. II	4
MATH 340 Diff. Equations	4
PHYS 252 Gen. Phys.	5

#### Spring

CHE 331 Prin. of Engr. Materials	4
CHEM 303 Organic Chem. Lab.	2
CHEM 307 Organic Chem.	3
PHYS 253 Gen. Phys.	5
Soc. Sci. or Hum.**	4

### Junior

#### Fall

CE 301 Applied Mechanics	5
CHE 305 Thermo-Kinetics I	5
CHE 342 Unit Oper. I	5
CHEM 453 Phys. Chem.	3

#### Winter

CHE 306 Thermo II	2
CHE 307 Kinetics I	2
CHE 344 Unit Oper. III	5
CHE 400 Appld. Chem. Calc.	5
CHE 418 Materials Lab.	2
CHEM 454 Phys. Chem.	3

#### Spring

CHE 308 Thermo-Kinetics II	4
CHE 343 Unit Oper. II	4
CHE Tech. Elec.	3
CHEM 459 Physical Chemistry	3
CHEM 456 Phys. Chem. Lab.	3
Soc. Sci. or Hum.**	3

### Senior

#### Fall

CHE 415 Lab III-Unit Oper.	3
CHE 442 Proc. Control	4
CHE 443 Design	5
Technical Elective***	3
EE 313 Basic Elec. Engr. I	3

*Winter*

CHE 417 Lab V-Proc. Control .....	2
CHE 444 Design .....	4
EE 314 Basic Elec. Engr. II .....	3
OR	
EE 315 Basic Elec. Engr. III .....	3
Soc. Sci. or Hum.** .....	4
ENG 305J or passing Junior-level composition exemption exam .....	4

*Spring*

CHE 416 Lab IV-Unit Oper. ....	3
CHE Tech Elec. ....	3
Technical Elective*** .....	3
Soc. Sci. or Hum.** .....	5
Tier III .....	4

The program listed above contains the minimum of 203 hours of required courses for the degree. This assumes that no English composition courses are required.

\*May be taken in any order.

\*\*NOTE: In general, courses outside the chemical engineering sequence can be taken at any time provided prerequisites have been met. A minimum of 24 hours must be taken in social studies and humanities, with at least nine hours in each area and adherence to the University General Education Requirements.

\*\*\*Minimum list available in departmental office. These are courses in the areas of engineering, chemistry, mathematics, and physics. Minimum of 3 Chem. Eng. and 9 additional CHE or other tech. elective hours required.

\*\*\*\*If required by English Composition Placement Exam.

## **BACHELOR OF SCIENCE IN CIVIL ENGINEERING**

(Major code #7252)

The civil engineering curriculum is designed to give the student a broad understanding of the basic physical sciences and mathematics. It provides a knowledge of civil engineering principles and practice in the areas of (1) engineering materials, including fluids and soils; (2) design of highways and other transportation facilities, including traffic control systems; (3) design and construction of structures of all types; (4) environmental sanitation with particular emphasis on water supply and wastewater disposal; and (5) water resources, with emphasis on engineering applications, including hydrology and hydraulics. The curriculum also is designed to enhance the student's understanding of the world and its culture by introducing him or her to university-level study in humanities and social science.

Civil engineers are primarily responsible for planning the design and construction of all the nation's constructed facilities. They plan, produce, and help operate the nation's transportation system. They must develop yet conserve water resources. They have a large role in designing the country's environmental protection relating to water, air, and solid wastes. They are involved in housing and urban development. They study the earth's soils and oceans to serve people better.

Graduates are prepared to pursue advanced study or to find employment with consulting engineering firms, private corporations, or government agencies.

A co-op program is available for qualified civil engineering students who have completed their sophomore year. This enables them to obtain technical experience and income by working for private or government organizations while completing their academic studies. The junior and senior course requirements then take a minimum of three years for completion, with co-op work and courses taken in alternate academic quarters. Students interested in the co-op program should consult with the department chair.

*Freshman**Fall*

CHEM 151 Fund. of Chemistry I .....	5
IT 101 Engr. Drawing I .....	3
MATH 263A Analytic Geom. & Calc. ....	4
Freshman English requirement .....	5

*Winter*

CHEM 152 Fund. of Chemistry II .....	5
INCO 103 Public Speaking .....	4
IT 121 Descr. Geom. ....	3
MATH 263B Analytic Geom. & Calc. ....	4

*Spring*

CE 210 Plane Surveying .....	4
CHEM 123 Princ. of Chemistry .....	4
ET 280 Engr. and Tech. - An Overview .....	4
MATH 263C Analytic Geom. & Calc. ....	4

*Sophomore**Fall*

CE 220 Statics. ....	4
ET 181 Computer Methods .....	4
MATH 263D Analytic Geom. & Calc. ....	4
PHYS 251 Physics .....	5

*Winter*

ET 240 Computer Methods in Engineering II .....	4
ME 224 Dynamics .....	4
PHYS 252 Physics .....	5
Elective .....	

*Spring*

CE 222 Strength of Materials .....	4
CE 223 Strength of Materials Lab. ....	1
MATH 340 Diff. Equations .....	4
PHYS 253 Physics .....	5

*Junior**Fall*

CE 330* Struct. Theory I .....	5
CE 340 Fluid Mechanics .....	5
CE 341 Fluid Mechanics Lab. ....	1
GEOL 283* Geol. ....	5

*Winter*

CE 311* Route Engr. ....	4
CE 370* Soil Engr. ....	4
ISE 304* Statistics .....	3
ME 321 Thermodynamics .....	4

*Spring*

CE 342* Appld. Hydraulics .....	3
CE 343* Hydrology .....	3
CE 361* Transportation .....	3
CHE 331 Prin. of Materials .....	4
Junior English composition requirement.	

*Senior**Fall*

CE 450* Water Treatment .....	3
EE 313 Basic Elec. Engr. I .....	3
Electives .....	

*Winter*

CE 432* Concrete Design .....	4
CE 451* Wastewater Treatment .....	3
EE 314 Basic Elec. Engr. II .....	3
OR	
EE 315 Basic Elec. Engr. III .....	3
Electives .....	

*Spring*

CE 433* Steel Design .....	4
Electives .....	

\*Course offered only during quarter shown.

The above list shows only courses specifically required for a civil engineering degree. In addition to these, 24 credit hours are required in the humanities and social sciences

with no fewer than eight in either field. A list of acceptable electives is available in the civil engineering office.

Also required are one senior design course and an additional three civil engineering electives, which may include additional senior design courses. The senior design course will be selected from CE 491A Land Use, CE 491B Water Resources, Environmental, and CE 491C Structures-Soils. Among the three additional electives, the student is required to earn at least three credits of design content. Design credits are shown within parentheses in the following list: CE 424 Str. Matls. (1); CE 434 Struc. Des. (3); CE 457 Wtr. Res. (3); CE 462 Traffic (2); CE 471 Found. (3); and CE 481 Pave. Des. (3). Other electives may be selected from CE 331 Struc. Th.; CE 410 Surv. II; CE 415 Photogram.; and CE 452 Wtr. Anal.

Qualified students may, with the permission of the instructor, substitute certain graduate-level courses for the foregoing civil engineering electives.

Additional 8 hours of approved courses are also required as open electives. A list of acceptable courses for these is available from the Department of Civil Engineering.

A minimum of 197 quarter hours of credit is required for the degree. Students also must satisfy University General Education Requirements (see the Graduation Requirements section of this catalog).

## BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

(Major code #7253)

The Department of Electrical and Computer Engineering (ECE) is located in Stocker Center, a modern facility housing undergraduate, graduate, and research activities of the department. The department is the beneficiary of a major endowment from the late Dr. C. Paul Stocker, an electrical engineering alumnus. This endowment is providing support for facilities and a level of excellence equal to or better than those of major departments of electrical and computer engineering in this country.

Electrical engineering addresses the wide application of electrical and electronic phenomena to real-world needs, from consumer goods to space exploration. It encompasses such diverse areas as research, development, design, sales, and operation of electrical and electronic systems. Areas of specialization include such varied fields as circuit design, communications, computers and automata, control systems, electromagnetics, energy sources and systems, power transmission and distribution, electronics, and instrumentation. For students with an interest in digital computers, there are courses in the department on programming, digital circuits, and computer design, and outside courses related to software engineering.

The electrical engineering program in ECE, leading to the Bachelor of Science degree, is Engineering Accreditation Council of the Accreditation Board of Engineering and Technology (EAC/ABET) accredited. Electrical engineering graduates hold numerous challenging positions in many nonelectrical industries such as chemical, nuclear, automotive, medical, textile, petroleum, and transportation, to name only a few, as well as positions in electronics, communications, power, control, and other electrical industries. The job functions performed by electrical engineering graduates include many diverse activities, such as research, development, design, production and manufacturing, and consulting.

Following a freshman year which is essentially common to all engineering degree programs, the electrical engineering student is promptly introduced to circuit theory and modern electronic instrumentation. The remainder of the sophomore year and the junior year provide a solid analyti-

cal foundation for all of the various electrical engineering specialties. The senior year provides an opportunity for the student to specialize in those areas he or she finds most interesting. Courses may be chosen from communications, power systems and energy conservation, network theory, electronics, avionics, electromagnetic fields, computer systems, control systems, and others. For students seeking greater depth and breadth, the Department of Electrical and Computer Engineering offers programs leading to the M.S.E.E. and Ph.D.

Students may earn internship credit by participating in approved internship programs with industry. Approved internships may be applied toward graduation requirements. Ohio University is unique in offering internships in avionics engineering. Recognition of our graduates by government and industry means employment opportunities in a dynamic, exciting technical-specialty field.

The Ohio University Avionics Engineering Center, a research and engineering organization that is a unit within ECE, is extraordinary in providing undergraduate electrical engineering majors direct field and laboratory experience on real-world avionics projects sponsored by federal agencies and industry. Internship course credit can be granted for laboratory work performed, and a number of part-time jobs are supported for qualified students. Interns work directly with the professional faculty and staff on a variety of projects involving instrument landing systems, navigation processors, test flight evaluation, and low frequency navigation sensor systems.

### Freshman

#### Fall

CHEM 151 Fundamentals of Chemistry I .....	5
MATH 263A Analytic Geom. & Calculus .....	4
Freshman Composition <sup>2</sup> .....	5
Humanities and/or Social Science Electives <sup>3</sup> .....	3-5

#### Winter

CHEM 152 Fundamentals of Chemistry II .....	5
ET 280 Engineering and Tech. - An Overview .....	4
IT 101 Engineering Drawing I .....	3
MATH 263B Analytic Geometry & Calculus .....	4
Humanities and/or Social Science Electives <sup>3</sup> .....	3-4

#### Spring

CHEM 123 Princ. of Chemistry .....	4
ET 181 Computer Methods in Engr. I .....	4
INCO 103 Public Speaking .....	4
MATH 263C Analytic Geometry & Calculus .....	4
Humanities and/or Social Science Electives <sup>3</sup> .....	3-4

### Sophomore

#### Fall

EE 210 Circuit Analysis I .....	4
ET 240 Computer Methods in Engr. II .....	4
MATH 263D Analytic Geom. & Calculus .....	4
PHYS 251 General Physics .....	5

#### Winter

CE 220 Statics .....	4
EE 200 Intro to Personal Computers for Engineers .....	0
EE 211 Circuit Analysis II .....	4
EE 221 Instrumentation Laboratory .....	2
MATH 340 Differential Equations .....	4
PHYS 252 General Physics .....	5

#### Spring

EE 212 Circuit Analysis III .....	4
EE 222 Introduction to Digital Circuits .....	3
EE 232 Analytic Foundations in Electrical Engr. ....	5
ME 224 Dynamics .....	4
Humanities and/or Social Science Electives <sup>3</sup> .....	3-4

### Junior

#### Fall

CE 222 Strength of Materials .....	4
EE 301 Intermediate Laboratory I .....	1

EE 310 Linear Systems and Networks I .....	4
EE 321 Electromagnetics & Materials I .....	5
EE 340 Electronics I .....	5

*Winter*

EE 302 Intermediate Laboratory II .....	1
EE 312 Linear Systems & Networks II .....	4
EE 322 Electromagnetics & Materials II .....	5
EE 341 Electronics II .....	4
EE 367 Introduction to Microprocessors .....	4

*Spring*

EE 303 Intermediate Laboratory III .....	1
EE 335 Energy Conversion .....	5
EE 371 Applied Probability and Statistics for EE <sup>1</sup> .....	4
ENG 305J Technical Writing .....	4
ME 321 Thermodynamics .....	4

*Senior**Fall*

EE Senior Concentration Elective I <sup>1</sup> .....	3
Technical Elective <sup>5</sup> .....	3
PHYS 316 Contemporary Physics .....	3
Mathematics Elective <sup>6</sup> .....	4
Humanities and/or Social Science Electives <sup>3</sup> .....	3-5

*Winter*

EE Senior Concentration Elective II <sup>4</sup> .....	3
EE 495 Electrical Engineering Design .....	3
Technical Elective <sup>5</sup> .....	3
EE 401 Advanced Laboratory <sup>7</sup> .....	1
Humanities and/or Social Science Electives <sup>3</sup> .....	3-5
University TIER III Requirement <sup>8</sup> .....	4-5

*Spring*

EE Senior Concentration Elective III <sup>4</sup> .....	3
Technical Elective <sup>5</sup> .....	6
EE 402 Advanced Laboratory <sup>7</sup> .....	1
Humanities and/or Social Science Electives <sup>3</sup> .....	6-9

<sup>1</sup> Alternatives to sequence CHEM 151, 152, and 123 are the following sequences:

CHEM 151, ZOOL 170, and ZOOL 171;  
CHEM 151, BOT 110, and BOT 111; or  
CHEM 151, GEOL 283, GEOL 211 or 270.

<sup>2</sup> Freshman English composition requirement can be satisfied in any quarter of the freshman year. ENG 151 Fr. Comp., Wrtng & Rhet. is preferred.

<sup>3</sup> Total hours must be at least 24 with at least 8 in humanities and 8 in social sciences. See College of Engineering and Technology section or degree requirements for the information on specific course selections.

<sup>4</sup> Must be taken in same EE area each quarter, i.e., controls, communications, power, etc. Contact the ECE Department for a list of senior concentration elective courses offered each year.

<sup>5</sup> Technical electives are normally 400 level EE courses not used as senior system electives. However, technical electives can (with prior department approval) be other 400 level engineering, mathematics, or computer science courses. Contact the ECE Department for a list of non-EE courses that can be selected for technical electives.

<sup>6</sup> Can be taken in any quarter of the senior year. Must be selected from the following: MATH 411, 413A, 440, 441, 444, 446, 450A, 460A, 470, or 480A. Other 400 level math courses can be taken with prior approval by the ECE Curriculum Committee.

<sup>7</sup> Must take at least one structured senior lab. Contact the ECE Department for a list of structured labs taught each year.

<sup>8</sup> University TIER III requirement can be satisfied in any quarter of the senior year.

Students transferring from other institutions should consult with the ECE office to determine the remaining requirements for the completion of the degree.

## BACHELOR OF SCIENCE IN INDUSTRIAL AND SYSTEMS ENGINEERING

(Major code #7255)

Industrial and systems engineers obtain a broad technical background with special attention to productivity, costs, quality, and the human factor in production and other systems. They design and supervise installation of facilities for production of goods and services including the

layout of buildings, machines, and equipment, taking into account such vital factors as ecology, energy conservation, safety, and health. They also design and supervise installation of computer systems with applications to production, marketing, banking, and health care. Industrial and systems engineers develop performance measures and standards for equipment, workers, and factories to achieve more effective utilization; and they translate technical designs of other fields of engineering and science into production or other practical applications.

Courses in the first two years of the program are similar to the curricula of other engineering departments, and provide the necessary foundation in basic subjects upon which advanced engineering work depends. The last two years of work provide the professional-level material, including computer-related instruction, necessary for the interdisciplinary activities that are required of the modern industrial or systems engineer.

Industrial and systems engineers follow careers in many fields: manufacturing, transportation, and government; and for those interested in computers and information processing: banking, insurance, and hospitals. Many industrial and systems engineers move into management positions after a few years of experience. Salaries are excellent and jobs are plentiful. Because of the increasing need for the U.S. to improve productivity to meet international competition, the need for industrial and systems engineers in manufacturing and other organizations should remain high.

*Freshman**Fall*

CHEM 121 Princ. of Chem. I .....	4
OR	
CHEM 151 Fund. of Chem. I .....	5
ET 280 Engr. and Tech. - An Overview .....	4
INCO 103 Public Speaking .....	4
English composition .....	5

*Winter*

CHEM 122 Princ. of Chem. II .....	4
OR	
CHEM 152 Fund. of Chem. II .....	5
ECON 103 Prin. Microeconomics .....	4
IT 110 Manufacturing Processes .....	4
MATH 263A Analytic Geom. & Calc. .....	4
Electives*	

*Spring*

IT 101 Engineering Drawing I .....	3
ET 181 Computer Methods in Engr. I .....	4
MATH 263B Analytic Geom. & Calc. .....	4
Electives*	

*Sophomore**Fall*

ET 240 Computer Methods in Engr. II .....	4
ISE 231 Intro to Indust. & Systems Engr. .....	2
MATH 263C Analytic Geom. & Calc. .....	4
PHYS 251 Gen. Physics .....	5
Electives*	

*Winter*

ACCT 201 Financial Accounting .....	4
ISE 305 Engineering Statistics I .....	3
MATH 263D Analytic Geom. & Calc. .....	4
PHYS 252 Gen. Physics .....	5

*Spring*

ISE 306 Engineering Statistics II .....	3
ISE 330 Engr. Economy .....	3
MATH 340 Differential Equations .....	4
PHYS 253 Gen. Physics .....	5
Electives*	

*Junior**Fall*

ISE 426 Microprocessor Applications .....	4
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ISE 307 Engineering Statistics III .....	3
ISE 333 Work Design .....	5
MATH 211 Elem. Linear Algebra .....	4

*Winter*

CIE 331 Princ. of Engr. Materials .....	4
EE 313 Basic Elec. Engr. I .....	3
ENG 305J Technical Writing .....	4
ISE 415 Intro to Systems Engr. ....	3
ISE 441 Operations Research .....	3

*Spring*

CE 301 Applied Mechanics of Materials .....	5
EE 314 Basic Elec. Engr. II .....	3
OR	
EE 315 Basic Elec. Engr. III .....	3
ISE 432 Manufacturing Control .....	3
ISE 448 Human-Machine Systems .....	3
ME 321 Intro to Thermodynamics .....	4

## Senior

*Fall*

ISE 435 Quality Control .....	3
ISE 445A Systems Design I .....	3
Electives*	

*Winter*

ISE 440A Indust. Plant Design I .....	3
ISE 433 Indust. Computer Applic. ....	5
Electives*	

*Spring*

ISE 445B Systems Design II .....	3
ISE 440B Indust. Plant Design II .....	3
Tier III Elective .....	4
Electives*	

\*A minimum of 39 hours of electives is required, including:

—21 hours in social sciences and humanities. Sequences are required in each area including advanced courses in each area. An advanced-level course is defined as one which (1) is at the 300 or higher level (except for courses dual-listed with 100- or 200-level courses); or (2) has a specified prerequisite. (See requirements of the College of Engineering and Technology.)

—6 hours in industrial and systems engineering.

—4 hours of approved mathematics or science electives selected from MATH 306, 307, 314, 330A, 343, 360, 410, 411, 441, 442, 443, 444, 450A, 470; CHEM 123, 153, 345; PHYS 272, 273, 311, 316, 351, 411, 423, 427; ZOOL 170, 225; GEOL 270, 283.

—4 hours from Tier III courses.

—4 hours of electives to be freely chosen.

Students may specialize in one of a wide variety of fields by the proper choice of electives. We urge students to come to their advisors or the department office for detailed information about electives.

## BACHELOR OF SCIENCE IN INDUSTRIAL TECHNOLOGY

(Major code #7256)

Industrial Technology is the study of materials, production processes, and management procedures used in manufacturing products. This degree program prepares a person for a technical/management position in the manufacturing industry. Typically, an industrial technology graduate controls industrial materials, machines, personnel, and capital in areas of production, process planning, maintenance, and quality control.

The industrial technology program prepares a person to be a "technical generalist"; one who knows about a wide range of technical subjects. In addition, since most industrial technology courses are "hands-on" lab courses, an industrial technology graduate has practical experience.

There are five components to the curriculum. Each component contributes a valuable part to a graduate's overall preparation for employment. A minimum of 192 quarter hours is required for graduation, including specific degree requirements.

## Degree Requirements

Required General Courses: 71

### General Education

Freshman English (ENG 151)

Junior English (IT 370J)

ECON 103

INCO 103

PSY 101

Tier III Synthesis

Math and Computer Science

CS 220

MATH 163A, 250B

QBA 201

Physical Science

CHEM 121, 122

PHYS 201, 202

Humanities and Social Science

Select three courses in different areas (12 hrs. min.) from approved College of Engineering and Technology Humanities and Social Science list.

Required Business/Management Courses: 20

ACCT 201

HRM 420

MGT 300

MKT 301

POM 310

Required IT Courses: 70

IT 101 Engineering Drawing I

IT 102 Engineering Drawing II

IT 110 Introduction to Manufacturing Processes

IT 115 Metal Fabrication

IT 117 Basic Metal Machining

IT 150 Wood Technology

IT 215 Metal Casting

IT 217 Production Metal Machining

IT 221 Power Transmission

IT 308 Industrial Plastics

IT 320 Hydraulic Controls

IT 332 Electronics I

IT 333 Electronics II

IT 351 Production Tooling

IT 363 Quality Control

IT 390 Industrial Materials

IT 435 Control Circuits

IT 452 Computer-Integrated Manufacturing

IT 462 Product Manufacture

plus 9 hrs. minimum of IT electives

Required Interest Courses: 20

Students are required to select one of two alternatives: Management, or Technical. A minimum of 20 hrs. is required.

### Management

any courses 200 level or above in BA, BUSL (except 465), CS, FIN, HRM, MGT, MIS, POM, QBA

### Technical

any courses 200 level or above in CHE, CE, CS, EE, ISE, ME, MATH

For AAS transfer students, selected courses from degree specialty.

Free Electives: 11

## First-Year Program

Industrial technology courses are grouped according to prerequisites and background information required. The following first level classes are suggested for a student's first year. An advisor will help each student plan additional coursework so as to meet all graduation requirements in a timely manner.

### Freshman

#### Fall

CHEM 121 Principles of Chemistry .....	4
INCO 103 Public Speaking .....	4

IT 101 Engineering Drawing I .....	3
IT 110 Introduction to Manufacturing Processes .....	4
<i>Winter</i>	
ECON 103 Principles of Microeconomics .....	4
IT 102 Engineering Drawing II .....	3
IT 117 Basic Metal Machining .....	3
MATH 163A Introduction to Calculus .....	4
PHYS 201 Introduction to Physics .....	4
<i>Spring</i>	
IT 115 Metal Fabrication .....	3
MATH 250B Finite Mathematics .....	4
Freshman English .....	5
PSY 101 General Psychology .....	5

## Associate Degree Transfer Students

Students who have completed a two-year associate degree from an accredited college or university in a related technical area may enter the industrial technology program with junior standing. An assessment of previous coursework will determine the remaining requirements for the bachelor's degree.

## BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

(Major code #7257)

Mechanical engineering is concerned with (1) the economical and ecological conversion of energy from natural sources to provide power, heat, cooling, and propulsion; (2) the design of all types of machines, engines, and vehicles; (3) the processing of materials into useful products; and (4) the development of systems for using machines and resources. Professional areas include research, development, design, testing, production, operation and maintenance, marketing and sales, and administration.

The curriculum provides the versatile academic preparation required to enter the profession and the fundamentals of a liberal education. Theoretical analysis, practicality, laboratory skills, and design synthesis are important factors in the curriculum. The coursework is quite diversified so as to provide the broad background required by mechanical engineers. The opportunity for specialization is provided by elective courses during the senior year. There are three major areas of specialization: energy-systems design, mechanical-systems design, and manufacturing-process design.

Students majoring in mechanical engineering as preparation for entry into other professions such as law, medicine, business, etc., should consult with the department chair regarding schedule modification required to meet specific career objectives.

The Department of Mechanical Engineering offers a co-op program which allows those students who wish to do so to acquire practical experience and income by working in industry after completion of the freshman year. Junior and senior courses are scheduled to accommodate a work-academics plan based on alternate periods of study and work. Students who are interested in the co-op program should consult with the department chair.

The Paul H. and Irene C. Black Memorial Fund provides generous scholarships for seniors majoring in mechanical engineering. A good academic record, a history of work to cover the costs of education, and an intent to acquire a graduate degree are key considerations in awarding the scholarship. Contact the department chair for additional information.

### Freshman

<i>Fall</i>	
IT 101 Engr. Drawing I .....	3
MATH 263A Analytic Geom. & Calc. ....	4

Freshman English requirement <sup>1</sup> .....	5
Hum. & Soc. Sci. Elec. <sup>6</sup> .....	
<i>Winter</i>	
ET 181 Compr. Meth. in Engr. I .....	4
INCO 103 Pub. Spkng. ....	4
MATH 263B Analytic Geom. & Calc. ....	4
PHYS 251 Gen. Physics .....	5
Hum. & Soc. Sci. Elec. <sup>6</sup> .....	

<i>Spring</i>	
ET 280 Engr. and Tech.-An Overview .....	4
IT 121 Descr. Geom. ....	3
MATH 263C Analytic Geom. & Calc. ....	4
PHYS 252 Gen. Physics .....	5
Hum. & Soc. Sci. Elec. <sup>6</sup> .....	

### Sophomore

<i>Fall</i>	
CE 220 Statics .....	4
CHEM 151 Fund. of Chem. I .....	5
MATH 263D Analytic Geom. & Calc. ....	4
PHYS 253 Gen. Physics .....	5

<i>Winter</i>	
CHEM 152 Fund. of Chem II .....	5
IT 117 Basic Metal Machining .....	3
MATH 340 Diff. Equations .....	4
ME 224 Dynamics .....	4

<i>Spring</i>	
CE 222 Strength of Materials .....	4
CE 223 Strength of Materials Lab. ....	1
CHEM 123 Prin. of Chem. III .....	4
ENG 305J Technical Writing .....	4
Hum. & Soc. Sci. Elec. <sup>6</sup> .....	

### Junior

<i>Fall</i>	
CE 340 Fluid Mechanics .....	5
CHE 331 Prin. Engr. Materials .....	4
ME 321 Intro to Thermodynamics .....	4
ME 350 Intro to CAD .....	2
ME 398 Junior Laboratory <sup>2</sup> .....	3

<i>Winter</i>	
ET 240 Comput. Methods in Engr. II .....	4
ME 301 Kinematics & Dynamics of Machines .....	4
ME 313 Metal Processing .....	3
Technical Electives <sup>5</sup> .....	4

<i>Spring</i>	
CHE 418 Chem. Engr. Lab-Materials .....	2
ME 328 Applied Thermodynamics .....	4
ME 403 Machine Design I .....	4
ME 412 Heat Transfer .....	4

### Senior

<i>Fall</i>	
EE 304 Basic EE I Lab .....	1
EE 313 Basic EE I (circuits) .....	3
ME 491 Mechanical Vibrations I .....	3
ME 417 Design of Thermal Systems <sup>4</sup> .....	4
ME 480 Colloquium <sup>7</sup> .....	0
ME 498 Senior Lab <sup>3</sup> .....	3
ME 499 Senior Design Project <sup>8</sup> .....	4

<i>Winter</i>	
EE 314 Basic EE II (electronics) .....	3
EE 305 Basic EE II Lab .....	1
ME 404 Machine Design II <sup>4</sup> .....	4
ME 450 Computer-aided Design .....	3

<i>Spring</i>	
EE 315 Basic EE III (power) .....	3
ME 401 System Analysis & Controls .....	4
Technical Electives <sup>5</sup> .....	
Tier III Elective .....	4

<sup>1</sup> All students must meet University freshman and junior English standards.

<sup>2</sup> Schedule this laboratory during one quarter of the junior year.



- Schedule this laboratory during one quarter of the senior year.
- Students interested in mechanical design should enroll in ME 404 while those interested in design of energy systems should enroll in ME 417.
- Eight quarter credits of technical electives are required, to be selected in consultation with your advisor.
- Twenty-five hours of humanities and social sciences with a minimum of 9 hours in each area are required. ECON 103 is

required as part of the 9 hours in social sciences. Ten of the 25 hours must be at the 300 level and either require a prerequisite or be open only to juniors and seniors. Course sequences should be selected to build depth in two areas of concentration. Attendance at the ME Symposium is required of all ME students during their last three quarters on campus. Consult your advisor regarding Senior Design Project options.



# College of Fine Arts

Dora J. Wilson, *Dean*

James Stewart, *Associate Dean*

Bert Damron, *Assistant Dean*

Gretchen L. Stephens, *Assistant Dean for Administration*

## THE COLLEGE

The College of Fine Arts includes the schools of Art, Comparative Arts, Dance, Film, Music, Theater, and Visual Communication. A broad, cultural education in the fine arts is offered, as well as specialized training in the following areas: graphic design, illustration, art therapy, art history, art education, ceramics, painting, photography, printmaking, sculpture, dance, music education, music history and literature, music theory or composition, music therapy, acting, production design and technology, theater arts and drama, picture editing/page design, photo communication, photo illustration, multi-media, and informational graphics.

## DEGREES AND GENERAL REQUIREMENTS

The Bachelor of Fine Arts degree (B.F.A.) is granted upon completion of programs in the School of Art, the School of Dance, the School of Theater, and the School of Visual Communication. The School of Music grants the Bachelor of Music degree (B.Mus.).

All the programs of study within the College of Fine Arts are intended to provide students with a strong foundation in the arts and culture as well as an opportunity for specialized, professional training. Every effort is made through careful individual advising and a flexible curriculum to meet the individual needs of each student.

In some cases students may be advised that their qualifications are outstanding and certain courses will be waived from the proposed program of study. Students may request of advisors such a review of qualifications for course waiver. In some cases, additional approval by a faculty committee is required.

Candidates for degree programs in the College of Fine Arts must complete a minimum of 192 quarter hours with an accumulative grade-point average of at least 2.0 (C). The minimum number of quarter hours and accumulative grade-point average for some degree programs is higher, varying according to the requirements of the program.

## ADMISSION REQUIREMENTS

High school applicants to Ohio University who wish to pursue degree programs in the College of Fine Arts may

apply for direct entry into the college. Applicants are required to audition if they desire direct entry into programs in the School of Dance, School of Music, or School of Theater. Students requesting direct entry who are not screened in this manner will be accepted as premajors on a provisional basis only. Final acceptance into a major program necessitates meeting all entrance requirements as described under that major.

In addition to general acceptance for admission to Ohio University, students transferring from other colleges and universities are required to audition, submit a portfolio, or meet the requirements as specified by each program in the College of Fine Arts. Applicants are advised to write for detailed information to the director of the particular program in which they are interested.

Ohio University students requesting transfer to major programs of the college also are required to meet the above criteria and should consult the appropriate director prior to arranging for transfer.

## ADVISING

The College of Fine Arts maintains a system of academic advising for its majors with assigned members of the faculty serving in such capacity. The advisor keeps a current academic record for each student under supervision and is available for counseling, assisting the student in planning courses, and making sure that all requirements for the major are met. Deviations from the normal course requirements, including waivers, must be approved in writing by the advisor. In some cases additional approval by a faculty committee is required. Students are urged to meet with their advisors regularly, especially prior to registration, to ascertain that they are following an approved course of study.

In any case, each student alone has the ultimate responsibility for making certain that all academic requirements for graduation are being met.

## SCHOLARSHIPS AND AWARDS

There are a limited number of scholarships and awards of varying amounts available to majors in the College of

Fine Arts. Some awards are renewable; others are granted on a one-time basis, renewable at the discretion of the school involved. Awards are based primarily on talent demonstrated through audition, interview, and/or portfolio submission. In each case academic performance is considered important. Interested students should contact the director of the appropriate school before January 1, so that arrangements may be made for the appropriate audition or portfolio submission.

## MINORS

Minors are available in art, comparative arts, dance, film, music, and theater. The minors are designed for those students who are majoring in other fields but who wish, in the course of their formal education, to experience the arts.

Students who wish to declare a minor in the College of Fine Arts should consult with their major advisor, consult with an advisor within the minor program, and receive approval from the College of Fine Arts dean's office to pursue the program.

Any student declaring a minor within the College of Fine Arts must maintain a 2.0 g.p.a. in the minor.

As part of any major program within the College of Fine Arts, a student may select a minor from those offered by any department within the University.

## DOUBLE MAJORS

Students who wish to pursue a second major outside the College of Fine Arts should apply for admission to the college offering the second major. See A Second Bachelor's Degree in the Graduation Requirements section of this catalog for specific requirements.

In some cases students may wish to pursue simultaneously two majors within the College of Fine Arts, earning a dual major degree. Such students must be admitted to, and complete all requirements for, each of the desired majors.

Multitalented students who have an established record of achievement in two arts disciplines may apply for admission to the B.F.A. with dual emphasis major, as described below.

## BACHELOR OF FINE ARTS WITH DUAL EMPHASIS

The B.F.A. with dual emphasis is a degree option designed to meet the interests of the highly motivated and multitalented student who desires to blend the disciplines of more than one school within the college.

The program is administered by the College of Fine Arts dean's office. Students interested in pursuing this degree option should do the following:

1. Meet with the assistant dean of the College of Fine Arts to determine two areas of interest and appropriate advisors.
2. Meet with advisors in each area to discuss specific program prerequisites and requirements.
3. After completion of program prerequisites and a minimum of 45 hours earned, students formally declare the B.F.A. with dual emphasis major in the college office.

Degree requirements for B.F.A. students with dual emphasis are as follows:

1. Meet the requirements as specified for each area of emphasis declared. (Program requirements are described in each school's section of the Undergraduate Catalog.)
2. Maintain a 3.0 grade-point average in each area of emphasis.
3. Meet all General Education Requirements of the

University, earn 192 credit hours of which at least 90 must be at the junior-senior (300-400) level, and satisfy University residency requirements.

4. Successfully fulfill the senior project requirements as determined by the student's advisory committee.

## SCHOOL OF ART

Joe Bova, *Director*

The School of Art seeks to establish a foundation for critical thinking; to teach basic art skills and concepts; and to contribute to individual, creative growth. High standards of critical awareness are achieved through the learning of the language and theory of art, through the study of the historical development of art, and through classroom and individual critiques. Studio courses offer experience with tools and concepts leading to the acquisition of technical skills and aesthetic awareness. Programs are structured to serve individual goals and to permit personal growth; students will elect courses from throughout the University that will complement their interests. The curriculum, firmly founded on tradition, extends to include contemporary attitudes, concepts, and techniques. The undergraduate program is enriched by the presence of a vital graduate program.

The School of Art offers specialized training leading to the Bachelor of Fine Arts (B.F.A.) degree in art education, art history, art therapy, ceramics, graphic design, painting, photography, printmaking, sculpture, studio arts, or visual communication (see School of Visual Communication section for program description). Many graduates become teachers; enter graduate schools; become professional artists, designers, or photographers; or enter other art-related fields.

The School of Art also offers an art minor for those who wish to develop competence in an area other than their major.

Students greatly benefit from the dedication and experience of a faculty of artists/teachers who are professionally active. In addition, other artists and artist/teachers are invited to visit the School of Art for lectures, exhibits, and/or critiques. Through a series of regularly scheduled exhibits, Seigfred Gallery offers students an opportunity to see a variety of original work including a series of graduate student exhibits each spring.

The extensive and diverse facilities enable the school to offer specialized courses in a variety of areas which include, among others, typography, stone lithography, lost-wax casting, and color photography.

Students have numerous opportunities in the school and on campus for exhibition of their works including an annual juried undergraduate student show, a graphic design show, and senior shows. Recognition of outstanding art students is made through the Edna Way Scholarship Fund, the Upperclass Deans Scholarship, the Krecker Prize, and Rogers Award in art. Additional scholarships from the recently established Mary K. Leonard Art Education Scholarship, the L.C. Mitchell Memorial Scholarship, and the Rose Marie Darst Scholarship are available.

Students are strongly encouraged to consult regularly with an advisor concerning their selection of courses and progress toward fulfillment of degree requirements. A student may contact the School of Art advisor in 528 Seigfred or consult with the chair of the major areas. Art majors may review their records in the School of Art office.

## ADMISSION REQUIREMENTS

All students planning to become art majors enter the School of Art as premajors. Transfer students may submit portfolios to areas after having completed approximately 40 quarter hours of coursework. A comprehensive selection of courses at the freshman level familiarizes students with basic art concepts and provides initial experience in a variety of specific study areas. Sophomore students usually select courses in areas of their particular interests. Also, during the third quarter of the sophomore year, students submit portfolios to major areas for review for acceptance as majors, *except* for students wishing to major in photography who submit portfolios for entrance into ART 295, Intermediate Photography. Photography portfolios may be reviewed before the third quarter of the sophomore year. Students are encouraged to consult advisors in selecting majors and preparing portfolios. The requirements for the studio arts major vary from the foregoing procedure. The School of Art primary advisor will post dates for the studio arts committee's portfolio review.

Prior to the portfolio review, students will have completed freshman core courses (ART 100, 101, 102, 128), three courses in the proposed major area, and three studio elective courses (except prospective art education, art history, art therapy, or photography majors). Major areas will evaluate portfolios and recommend whether or not students will be accepted into the major area. Students who are not accepted may reapply or select another area in which to present a portfolio. A form will be placed in each student's file indicating the result of the portfolio review.

At the junior level, most students will be enrolled in advanced courses in their major areas. Many courses in the School of Art require prerequisites and/or permission. Permission implies that the faculty may wish to review previously completed work. This may take the form of a portfolio review. The program for seniors includes practicum courses offering preparation for senior presentations and portfolios.

## MAJOR AREAS AND REQUIREMENTS

Prior to graduation, all students must satisfy the requirements of Ohio University, the College of Fine Arts, and the School of Art.

All major programs within the School of Art require the completion of the freshman core courses: ART 100, 101, 102, and 128 (except photography which requires ART 100, 101, 102, 128, 191, and 192). Prospective ceramics, graphic design, painting, printmaking, sculpture, and studio arts majors also will complete three courses in the prospective major plus three studio elective courses prior to the portfolio review. Refer to area descriptions for portfolio review procedures for art education, art therapy, studio arts, and photography. Studio elective courses are any studio courses in the School of Art in an area other than the major. In general, courses numbered 100 are intended for freshmen, courses numbered 200 are intended for sophomores, courses numbered 300 are intended for juniors, and courses numbered 400 are intended for seniors.

Please note that ART 105, 115, 131, 141, 151 (except for graphic design majors), 191, and 192 (except for photography majors) DO NOT fulfill freshmen core requirements, but are intended as introductory media courses; however, these courses can be counted as studio electives.

Refer to the Program Requirements sections that follow for outlines of programs offered in the School of Art. For clarification of Tier I, II, and III courses and requirements, refer to the General Education Requirement section of this catalog. Lists of tier courses also are available from advisors.

## Art Education Major

(Major code #5122)

The B.F.A. degree program in art education serves as preparation for the teaching of art in grades kindergarten through 12. In addition to courses leading to teacher certification, the program includes extensive study in studio art and art history.

Application for admission to teacher education should be made during the third quarter of the freshman year; completion of PSY 101, INCO 103, freshman math, freshman English, preprofessional skills test, and a 2.5 accumulative g.p.a. are required.

To become an art education major, a student must submit an acceptable portfolio of studio work for review at the end of the sophomore year. Portfolio reviews are held the first week of May. In addition, art education majors must apply for advanced standing which requires the completion of EDCI 275 or PSY 275 with a grade of 2.0 or better, the "block program" of EDSE 250, 250L, 270, 270L with a grade of 2.0 or better, 90 quarter hours with a g.p.a. of 2.5 or better, a 2.5 accumulative average or better in ART 461 and 462, and application for EDCI 401 (Urban Field Experience).

Student teaching is normally assigned during one of the quarters of the senior year. Application for student teaching is to be made to the office of the director of student teaching no later than December 1 preceding the academic year in which the student teaching assignment is desired; a 2.5 or better accumulative g.p.a. is required.

### Program Requirements

#### Freshman

ART 100 Seeing and Knowing the Visual Arts .....	3
ART 101 Two-Dimensional Design .....	4
ART 102 Three-Dimensional Design .....	4
ART 128 Intro to Drawing .....	4
INCO 103 Public Speaking .....	4
PSY 101 Gen. Psych. ....	5
Studio Art .....	12
Tier I English composition (100 level) .....	5
Tier I quantitative skills elec. ....	4-5
Social science .....	4-5
	<b>49-51</b>

#### Sophomore

Studio Art .....	12-16
ART 254 Lettering .....	4
AH 211, 212, 213 History of Art .....	12
EDCI 275 Learning Proc. in the Classroom .....	5
OR	
PSY 275 Educational Psych. ....	4
EDSE 250 Analysis of Teaching .....	4
EDSE 250L Field Experience .....	2
EDSE 270 Studies of Learner .....	3
EDSE 270L Field Experience .....	1
Science .....	5
	<b>47-52</b>

#### Junior

Studio Art .....	20
ART 461 Art Exper. in the Elem. School .....	3
ART 462 Art Tchng. in the Second. School .....	3
Art history/comp arts elective .....	12
English composition (300 level) .....	5
EDSE 351 Instructional Proc. and Curriculum .....	5
Tier II .....	4-5
	<b>52-53</b>

#### Senior

Studio art .....	16-21
EDCI 401 Urban Field Exper. ....	2
EDCI 480 School and Society .....	3
EDM 480A Educational Media .....	2
EDPL 461, 463, 465 Student Teaching .....	16
EDSE 420 Teaching of Reading in Content Areas .....	4

EDSE 420L Field Experience .....	1
Tier III .....	4-5
	48-54

Total minimum hours required: 196

Other requirements: 76 quarter hours of studio art including at least one course each in two-dimensional art, three-dimensional art, and graphic design; 24 quarter hours of art history; and courses required for teacher certification. To achieve proficiency in two studio areas, a 39-hour, two-area concentration must be completed, including a consecutive sequencing of 5 studio courses at the 200 level or above in one area and a consecutive sequencing of 4 studio courses at the 200 level or above in another area. It is recommended that the student select one area as being three dimensional and the other area being two dimensional.

## Art History Major

(Major code #5123)

The B.F.A. degree program in art history includes a concentration of courses in art history, basic and advanced studio courses, and 35 hours of non-art courses. Students are encouraged to attain a reading knowledge of at least one foreign language. Art history majors enter graduate study, seek employment in museums, or work in related fields. Students are expected to arrange programs with advisors; selection of elective courses, in particular, should be undertaken only after consultation with an advisor.

### Program Requirements

#### Freshman

ART 100 Seeing and Knowing the Visual Arts .....	3
ART 101 Two-Dimensional Design .....	4
ART 102 Three-Dimensional Design .....	4
ART 128 Intro to Drawing .....	4
Tier I English composition (100 level) .....	5
Tier I quantitative skills elective .....	3-5
Tier II electives .....	12
Electives .....	13-16
	48-53

#### Sophomore

AH 211, 212, 213 Hist. of Art .....	12
Studio electives .....	12
Tier II electives .....	9-10
Electives .....	15-20
	48-54

#### Junior

Art history .....	12
Studio electives .....	12-15
Tier I English composition (300 level) .....	4
Tier II elective .....	5
Electives .....	14-17
	47-53

#### Senior

Art history .....	20
Tier III synthesis elective .....	4-5
Electives .....	24-29
	48-54

Total minimum hours required: 192

## Art Therapy Major

(Major code #5144)

The B.F.A. degree program with a major in art therapy provides a comprehensive background in art and psychology for entrance into post-baccalaureate programs offering art therapist certification (M.A. programs, clinical training programs, institute and certification programs).

Art therapists work with individuals and groups in clinical, educational, and rehabilitative settings in psychiatric centers, clinics, community centers, nursing homes, drug and alcohol treatment clinics, schools, institutions, halfway houses, prisons, developmental centers, residential treatment centers, general hospitals, and in other locations. The art therapist integrates personal training and experience in art and therapy with theories of human behavior, with an understanding of normal and abnormal behavior, with skills in intervention methods, and with creative expressions in art.

To become an art therapy major, a student must submit a portfolio of studio work for review at the end of the sophomore year. If the portfolio is deemed satisfactory, the student will be accepted into the art therapy major.

### Program Requirements

(includes tier requirements)

#### Freshman

ART 100 Seeing and Knowing the Visual Arts .....	3
ART 101 Two-Dimensional Design .....	4
ART 102 Three-Dimensional Design .....	4
ART 228 Basic Drawing .....	4
Studio elective .....	4
Tier I English composition (100 level) .....	5
Tier I quantitative skills, PSY 121 Elementary Statistics .....	5
Tier II electives .....	9-12
Tier II PSY 101 General Psychology .....	5
Tier II SOC 101 Introduction to Sociology .....	5
	48-51

#### Sophomore

AH 211, 212, 213 History of Art .....	12
ART 271 Intro to Art Therapy .....	5
MUS 181 Introduction to Music Therapy .....	3
PSY 273 Child and Adolescent Psychology .....	4
Studio electives** .....	8
Tier II, electives .....	8
	40

#### Junior

ART History elective (300 level) .....	8
ART 371 Art Therapy .....	5
ART 373 Developmental Art Therapy .....	5
PSY 233 Psychology of Personality .....	4
PSY 332 Abnormal Psychology .....	4
PSY 336 Social Psychology .....	4
PSY 376 Psychological Disorders of Childhood .....	4
Tier I English composition (HLTH 370J) .....	4
Directed electives .....	8
Studio electives** .....	5
	51

#### Senior

ART 370 Art Therapy: Theory and Research .....	5
ART 470, 471, 472 Art Therapy Practicum & Field Experiences .....	13
PSY 374 Psych. of Adult and Aging .....	4
Tier III synthesis elective .....	4
Directed electives .....	5-8
Studio electives** .....	10-14
	41-48

Total minimum hours required: 192

Post-baccalaureate work in an AATA approved Master in Art Therapy Program is required for earning necessary points (12) toward registration as a certified art therapist.

\*entrance into the Art Therapy major is by portfolio review at the end of the sophomore year.

\*\*studio electives are to be concentrated in drawing, painting, and sculpture.

## Graphic Design Major

(Major code #6321)

The B.F.A. degree program in graphic design is intended to prepare professionals in the field of graphic design. Many

graduates have acquired positions in advertising agencies; other possibilities include illustration, work in publishing houses or greeting card companies, exhibit design firms, related government positions, packaging design, and museum design.

To become a graphic design major, a student must submit a portfolio of studio work for review at the end of the sophomore year. If the portfolio is deemed satisfactory, the student will be accepted into the program. The professional program of study for the junior and senior years is determined through counseling. A student may choose graphic design or illustration. A junior portfolio review is a prerequisite to the senior design sequence. The task of junior portfolio review is undertaken with an eye toward the intensified demands of senior-level studios and ultimately the profession. Senior major courses are individually oriented with provision for independent study. The program concludes with the preparation of a portfolio and a senior design exhibition.

### Program Requirements

#### Freshman

ART 100 Seeing and Knowing the Visual Arts .....	3
ART 101 Two-Dimensional Design .....	4
ART 151 Intro to Graphic Design .....	4
ART 102 Three-Dimensional Design .....	4
ART 128 Intro to Drawing .....	4
ART 191 Intro to Photog. ....	4
Tier I English comp. (100 level) .....	5
Tier I quantitative skills elective .....	3-5
Tier II .....	12-14
Electives .....	4
	<hr/> 47-51

#### Sophomore

AH 211, 212, 213 Hist. of Art .....	12
ART 228 Basic Drawing .....	4
ART 250 Graphic Design Prin. ....	4
ART 251 Typography .....	4
ART 254 Lettering .....	4
ART 328 Drawing .....	4
JOUR 221 Graphics of Communication .....	5
Studio electives .....	8
Tier II electives .....	10
	<hr/> 55

Admission to Major and Junior Studio Sequence requires sophomore portfolio review.

#### Junior

ART 351 Graphic Design: Jr. Studio .....	5
ART 352 Graphic Design: Jr. Studio .....	5
ART 353 Graphic Design: Jr. Studio .....	5
OR	
ART 357 Junior Design Studio/Image .....	5
Art History electives (300 level) .....	8
Studio electives .....	10-12
Tier I English composition (300 level) .....	5
Tier II electives .....	8-9
Electives .....	4
	<hr/> 50-53

Admission to Senior Design Sequence requires junior portfolio review.

#### Senior

ART 450 Design Practicum .....	3
ART 451, 452, and 453 Senior Design Studio .....	15
OR	
ART 456, 457, and 458 Sr. Design Studio/Illustration Focus .....	15
Studio electives .....	6-8
Tier III .....	4-5
Electives .....	15
	<hr/> 43-46

**NOTE:** Graphic design art studio requirements, sophomore portfolio review, and application to major: Studio Art Foundation - ART 101, 102, and 128 (12 hrs); ART 151 Intro to Graphic Design (4 hrs.); ART 191 Photography (4 hrs); Intermediate Drawing - ART 228 and 328 (8 hrs); and ART 250, 251, and 254.

Art studio elective recommendations for graphic design students: Printmaking or Photography (8 hrs) and Illustration (8 hrs).

Art studio elective recommendations for illustration students: painting, printmaking, graphic design, or photography.

### Ceramics Major (Major code #5127)

### Painting Major (Major code #5124)

### Printmaking Major (Major code #5128)

### Sculpture Major (Major code #5126)

The B.F.A. degree program with a major in one studio area provides extensive study in a single medium. Studio majors become professional artists or technicians, enter graduate schools, or work in related fields.

To become a major in ceramics, painting, printmaking, or sculpture, a student must submit a portfolio of studio work for review at the end of the sophomore year. Portfolios are to be presented to the area selected. If the portfolio is deemed satisfactory, the student will be accepted into the proposed major.

The basic requirements are 45 hours of major coursework and 45 hours of studio art classes outside the major area.

### Program Requirements

#### Freshman

ART 100 Seeing and Knowing the Visual Arts .....	3
ART 101 Two-Dimensional Design .....	4
ART 102 Three-Dimensional Design .....	4
ART 128 Intro to Drawing .....	4
Tier I English composition (100 level) .....	5
Tier I quantitative skills elective .....	3-5
Tier II electives .....	12
Electives .....	13-16
	<hr/> 48-53

#### Sophomore

AH 211, 212, 213 Hist. of Art .....	12
Proposed major .....	12
Studio electives .....	8
Tier II electives .....	9-10
Electives .....	7-12
	<hr/> 48-54

#### Junior

Art history elective (300 level) .....	4
Studio major .....	15
Studio electives .....	12-16
Tier I English composition (300 level) .....	4
Tier II elective .....	4
Electives .....	7-9
	<hr/> 46-52

#### Senior

Art history elective (300 level) .....	4
Major practicum .....	3
Studio major .....	15
Studio electives .....	13-15
Tier III synthesis elective .....	4-5
Electives .....	9-12
	<hr/> 48-54

Total minimum hours required: 192

### Studio Arts Major

(Major code #5118)

Students electing the studio arts major are to select a minimum of four courses, 200 level and above, in each of three studio areas which may include ceramics, drawing, graphic design, painting, photography, printmaking, or



sculpture. Portfolio review for entry into this major will be conducted by a studio arts committee.

### Program Requirements

Freshman	
ART 100 Seeing and Knowing the Visual Arts .....	3
ART 101 Two-Dimensional Design .....	4
ART 102 Three-Dimensional Design .....	4
ART 128 Intro to Drawing .....	4
Tier I English composition (100 level) .....	5
Tier I quantitative skills elective .....	3-5
Tier II electives .....	12
Electives .....	13-16
	48-53
Sophomore	
AH 211, 212, 213 Hist. of Art .....	12
Studio art .....	20
Tier II electives .....	9-10
Electives .....	7-12
	48-54
Junior	
Art history elective (300 level) .....	4
Studio art .....	27
Tier I English composition (300 level) .....	4
Tier II elective .....	5
Electives .....	7-13
	47-53
Senior	
Art history elective (300 level) .....	4
Studio art .....	31
Electives .....	9-12
Tier III synthesis elective .....	4-5
	48-52

Studio courses are to be distributed as follows:

a. 100-level courses .....	12
b. minimum of 4 courses, 200 level and above, in each of 3 areas (3 areas x 17 hours = 51 hours) .....	51
c. 300/400 level studio courses (in addition to hours required in b. above) .....	15
d. studio electives .....	12
minimum total .....	90

Total minimum hours required: 192

### Photography Major

(Major code #5143)

Photography majors may concentrate in fine arts photography or in applied photography with emphasis on media and photojournalism. Students intending to major in photography should enroll in ART 191 and 192; a satisfactory portfolio review is required for entrance into ART 295. Acceptance into ART 295 results in acceptance into the photography major. Students may not be enrolled in more than one photography course during any given quarter without written permission from the area coordinator.

The basic requirements are ART 490, 30 hours of photography beyond ART 297, and 45 hours of studio art classes other than photography. Students may not be enrolled in more than one photography course during any given quarter without written permission from the area coordinator.

A qualifying review of professional competence is required after completing five hours of junior-level photography. This junior review by the faculty must be passed as a requirement for graduation.

### Program Requirements

(includes tier requirements)

Freshman	
ART 100 Seeing and Knowing the Visual Arts .....	3
ART 101 Two-Dimensional Design .....	4

ART 102 Three-Dimensional Design .....	4
ART 128 Intro to Drawing .....	4
ART 191 Intro to Photog. ....	4
ART 192 Basic Photog. ....	4
Tier I English composition (100 level) .....	5
Tier I quantitative skills .....	3-5
Tier II electives .....	12
Electives .....	9-12
	48-53

Sophomore	
AH 211, 212, 213 Hist. of Art .....	12
ART 295, 296, 297 Intern. Photog. ....	15
Studio electives .....	9-12
Tier II electives .....	9-10
Electives .....	3-5
	48-54

Junior	
AH 307, 308, 309 History of Photography .....	12
ART 391, 392, 393 Photog. Arts .....	15
OR	
ART 397, 398, 399 Photog. Commun. ....	15
Studio electives .....	9-12
Tier I English composition (300 level) .....	4
Electives .....	3-6
	47-53

Senior	
ART 490 Photog. Practi. ....	3
Photography major .....	15
Studio electives .....	12-15
Tier II elective .....	5
Tier III synthesis elective .....	4-5
Electives .....	9-11
	48-54

Total minimum hours required: 192

### B.F.A. with Dual Emphasis

#### Art Emphasis

1. Core/foundations courses: 15 hours

Art 100, 101, 102, 128. These courses provide basic language and skills for art students and are an introduction to two- and three-dimensional concepts and art theory.

2. Selection of concentration: in the selection of the art concentration, students in the program follow the same procedure as other prospective art majors. In the areas requiring a portfolio review for admission as a major, a portfolio review is required at the end of the second year of study or as required by the area.

3. Admission and retention standards are the same as for majors.

4. Practicum requirement: In the areas requiring the practicum course, students in the program are required to enroll in the major practicum course leading to portfolio preparation and participation in a senior show. Practicum courses are intended to provide realistic experience in preparation and selection of work for exhibition.

5. A total of 59-67 hours is required, depending on area of concentration.

#### Art History Concentration

AH 211, 212, 213 Survey .....	12
ART 100 .....	3
ART 101, 102, 128, 191 .....	16
Studio art elective, 200 level .....	4
Art history electives .....	28
	63

#### Studio Art Concentration

ART 100 .....	3
ART 101, 102, 128 .....	12

3 courses at 200 level .....	12
3 courses at 300 level .....	15
2 courses at 400 level .....	10
Practicum in major area .....	3
Art history .....	12
2 courses at 200 level and 1 course at 300 level OR	
1 course at 200 level and 2 courses at 300 level	67

### Photo Studio Concentration

AH 307, 308, 309 .....	12
ART 100 .....	3
ART 101, 102, 128, 191 and/or 192 .....	16-20
ART 295 and sequence .....	30
Photography practicum .....	3
	64-68

## Art Minor

The art minor is offered for students not majoring in art who wish to pursue study in an area other than the major. To declare an art minor, the student is to consult with the major advisor, consult with a School of Art advisor, and receive approval from the College of Fine Arts dean's office. A 2.5 g.p.a. must be maintained in the minor.

Requirements for an art minor are:

AH 211, 212, 213 History of Art .....	12
OR	
ART 100 Seeing and Knowing the Visual Arts .....	3
ART 101 Two-Dimensional Design .....	4
ART 102 Three-Dimensional Design .....	4
ART 128 Intro to Drawing .....	4
Two 200/300 level studio courses (with permission)	
OR	
Two 200/300 level art history courses (with permission) ...	8-10
	31-34

Minimum hours required: 31

## SCHOOL OF COMPARATIVE ARTS

Jessica Haigney, *Director*

### ADMISSION REQUIREMENTS

The School of Comparative Arts offers only the Ph.D. degree. Undergraduate course offerings may be used to complete Tier II or elective requirements or to obtain a minor in comparative arts.

### Minor in Comparative Arts

CA 117 .....	4
CA 118 .....	4
CA 327 .....	4
CA 328 .....	4
CA 329 .....	4
CA 400, Senior Seminar .....	3
Two courses or eight hours from:	
CA 350 .....	4
CA 351 .....	4
CA 352 .....	4
CA 353 .....	4
CA 354 .....	4
CA/THAR 470 .....	4
CA/THAR 471 .....	4
CA/THAR 472 .....	4
CA/THAR 477 .....	4

Minimum credit hours required: 30

## SCHOOL OF DANCE

Gladys Bailin, *Director*

The School of Dance, a fully accredited member of the National Association of Schools of Dance, offers an undergraduate four-year professional training program leading to a Bachelor of Fine Arts degree. The overall goal of the school is to prepare its graduates for work in the field and for advanced graduate studies. The major provides students with intensive practice in technique and choreography, the study of history and ethnology, kinesiology, and the teaching of dance. Courses include a strong background in liberal arts education and fulfill dance major and University requirements. The curriculum provides a foundation upon which the student may build a career as a performer, choreographer, scholar, or teacher. Other related experiences in the school, such as technical production and arts administration, offer additional career options.

There are opportunities for performance in the Putnam Studio/Theater for both faculty and student choreographed works. Additional performance experience is gained through workshops, programs interrelated with other schools in the College of Fine Arts, and internships.

An extensive visiting artist program enriches the curriculum during the academic year. Major figures in the field of dance teach, choreograph, hold special workshops, and perform on our campus.

Strong individual academic and professional advising characterizes the School of Dance. Each student is encouraged to develop his or her unique talent through classwork and through performance. Progress is evaluated quarterly. Dance majors and minors are expected to maintain at least a 2.5 grade-point average in their dance coursework. Students who are found to be deficient may be placed on probation or advised to modify their program of study.

There are scholarship auditions in November and before February 15 for incoming freshmen. Appointments for visiting the school should be scheduled well in advance by contacting the School of Dance directly or the Office of Admissions. All transfer students intending to major in dance are required to audition as part of the admission process. An appointment for an audition and information on proficiency requirements can be obtained by contacting the director of the School of Dance.

Exceptionally talented and motivated students can pursue an individualized course of study through the Honors Tutorial Program. This program requires a distinctive combination of high school grades, test scores, teacher recommendations, and special achievements. Inquiries for eligibility should be directed to the School of Dance.

### ADMISSION REQUIREMENTS

An audition is required of all students who plan to major or minor in dance. The audition is in the form of a dance class and does not require presentation of previously learned materials. Students who wish to be considered for talent scholarships must be auditioned prior to February 15, otherwise appointments for audition can be made during the school year. Contact the School of Dance, 614-593-1826, for information. Though all prospective students are encouraged to attend auditions on the Ohio University campus, videotapes will be accepted under extenuating circumstances.

### MAJOR AREAS AND REQUIREMENTS

#### Major in Dance

Freshman

DANC 090 .....	0
DANC 101ABC, 102ABC, 103ABC .....	21

DANC 111 .....	2
DANC 170 .....	4
DANC 230 .....	2
DANC 380 .....	1-3
Tier I English composition (100 level) .....	5
Tier I quantitative skills .....	4-5
Tier II .....	5-9
Electives .....	6-9
	49-60

## Sophomore

DANC 090 .....	0
DANC 201ABC, 202ABC, 203ABC .....	21
DANC 240 .....	1
DANC 312 .....	3
DANC 331 .....	4
DANC 380 .....	1-3
DANC 441 .....	3
Tier II .....	10-15
Electives .....	6-10
	48-60

## Junior

DANC 090 .....	0
DANC 301ABC, 302ABC, 303ABC .....	21
DANC 313 .....	3
DANC 380 .....	1-3
DANC 432 .....	2
DANC 440 .....	2
DANC 442 .....	2
DANC 471 .....	4
English composition (300 level) .....	4
Tier II .....	4-5
Electives .....	6-10
	49-55

## Senior

DANC 090 .....	0
DANC 401AB, 402AB, 403AB .....	15
DANC 472* .....	4
DANC 473 .....	4
DANC 480 .....	2-4
Tier III .....	4-5
Electives .....	12-24
	43-56

\* or DANC 351 — offered alternate years.

Electives should include courses in philosophy, psychology, anthropology, studio art, art history, music performance, music history, theater history, acting.

Total minimum hours required: 192

## B.F.A. with Dual Emphasis

### Dance Emphasis

Basic requirements: Total 64 credit hours minimum in School of Dance

DANC 090 Composition Lab .....	0
DANC 101ABC, 102ABC, 103ABC Modern Dance Tech. I, Ballet Tech. I, Beginning Comp. ....	21
(This sequence must be completed in a single year.)	
DANC 370 Viewing 20th Century Dance .....	4
DANC 471, 472, or 473 History of Dance I, II, or III .....	4
DANC 380 (3 qtrs.) Practicum in Dance Production .....	1, 1, 1
DANC 480 Production Problems in Dance .....	2-4
	34-36

Plus at least 30 credit hours from the following:\*

DANC 111 Music for Dance I .....	2
DANC 201ABC, 202ABC, 203ABC Modern Dance Tech. II, Ballet Tech. II, Intermed Comp. ....	21
(This sequence must be completed in a single year)	
DANC 230 Intro to Dance Kinesiology .....	2
DANC 240 Practicum in Teaching Dance I .....	1
DANC 250 Ethnic Dance of Non-Western Cultures .....	2
DANC 255 Ethnic Dance of Western Cultures .....	2
DANC 310 Accompaniment for Dance .....	2

DANC 312 Music for Dance II .....	3
DANC 313 Dance Notation I .....	3
DANC 331 Analysis of Dance Movement .....	4
DANC 351 Dance Cultures of the World I .....	4
DANC 352 Dance Cultures of the World II .....	4
DANC 353 Dance Cultures of the World III .....	4
DANC 380 Practicum in Dance Production .....	1
DANC 432 Dance Kinesiology Seminar .....	2
DANC 441 Teaching Dance I (Children) .....	3
DANC 471 History of Dance I .....	4
DANC 472 History of Dance II .....	4
DANC 473 History of Dance III .....	4
DANC 490 Independent Study .....	1-10

\*By permission only.

Students must maintain at least a 3.0 grade-point average in dance to remain in the program. Standards for admission and retention are the same as for dance majors.

## Minor in Dance

A dance minor is designed for individuals majoring in other fields but who wish, in the course of their college experience, to gain an understanding of the art of dance. This program may, however, be applied toward the dance major sequence. Anyone wishing to become a dance minor must come to the School of Dance to be auditioned and advised. The first quarter of work is probationary. The minor program includes 30 credits, with a minimum of 4 credits of nonstudio courses at the 300 level or above. Program approval is required.

DANC 090 .....	0
DANC 101ABC .....	7
DANC 102ABC .....	7
DANC 103ABC .....	7
DANC 170 .....	4
DANC 380 .....	1
Dance electives .....	4-7
	30-33

It is strongly advised that DANC 101, 102, 103 be taken sequentially within one academic year. Under exceptional circumstances, and with faculty approval, other arrangements may be made.

## SCHOOL OF FILM

David O. Thomas, *Director*

### ADMISSION REQUIREMENTS

The School of Film, in conjunction with the College of Fine Arts, offers to a limited number of students a film emphasis as an option through the B.F.A. with dual emphasis. Admission to the program requires a 3.0 grade-point average, submission of a portfolio indicating creative abilities, evidence of writing skills, and a 500 word personal essay indicating applicant's career objectives and goals. Because the School of Film is primarily a graduate program, potential applicants should be aware that there are very few spaces available in the film component of the B.F.A. with dual emphasis.

### MAJOR AREAS AND REQUIREMENTS

#### B.F.A. with Dual Emphasis

##### Film Emphasis

The film emphasis requires a minimum of 66 hours in film with a 3.0 grade-point average in all film coursework.

A significant element of the film emphasis is the senior project which is designed to provide the student with a

portfolio piece upon graduation. The senior project may be a film or video piece, a screenplay, a written B.F.A. thesis, or a multidisciplinary project such as a gallery installation or performance piece.

#### Core Courses: (required)

FILM 201 Introduction to Film I .....	4
FILM 202 Introduction to Film II .....	4
FILM 203 Introduction to Film III .....	4

#### Advanced Courses: (required)

FILM 343 Scriptwriting .....	4
FILM 361 Motion Picture Prod. I .....	5
FILM 362 Motion Picture Prod. II .....	5
FILM 363 Motion Picture Prod. III .....	5
FILM 451 Theory I or Film 452 Theory II .....	4

#### Film History: (8 hours of the following)

FILM 421 Film and Culture .....	4
FILM 422 International Cinema .....	4
FILM 423 Film and Anthropology .....	4
FILM 431 Film History I .....	4
FILM 432 Film History II .....	4
FILM 433 Film History III .....	4

#### Film Electives: (12 hours from the following)

FILM 340 Film Techniques .....	4
FILM 341 Advanced Super-8 Production .....	4
FILM 452 Film Theory II .....	4
FILM 453 Film Theory III .....	4
FILM 471 Film Topics Seminar .....	1-5
FILM 472 Film Topics Seminar .....	1-5

#### Senior Project: (minimum of 10 hours from the following)

FILM 480 Individual Production Problems .....	1-5
FILM 482 Independent Study .....	1-5

### Minor in Film

#### Core courses: (required)

FILM 201 Introduction to Film I .....	4
FILM 202 Introduction to Film II .....	4
FILM 203 Introduction to Film III .....	4
FILM 340 Film Techniques .....	4
FILM 343 Scriptwriting .....	4

#### Film Electives: (12 hours from the following)

FILM 341 Advanced Super-8 Production .....	4
FILM 431 Film History I .....	4
FILM 432 Film History II .....	4
FILM 433 Film History III .....	4
FILM 451 Theory I .....	4
FILM 452 Theory II .....	4
FILM 471 Film Topics Seminar .....	1-5
FILM 472 Film Topics Seminar .....	1-5
FILM 473 Film Topics Seminar .....	1-5

## SCHOOL OF MUSIC

### Bert Damron, Acting Director

The curricula of the School of Music, culminating in the Bachelor of Music degree, are designed to prepare students for careers in teaching, music therapy, or performance. The School of Music makes provision for individual study in all branches of vocal and instrumental music and offers a wide range of courses in the fields of theory, composition, electronic music, music history and literature, music education, and music therapy. Opportunities are provided for individual participation in student recitals and for performing experience in various organizations, such as the Choral Union, the University Singers, the University orchestras, the bands, the Wind Symphony, the Opera Theater, the Jazz Ensembles, and many small chamber ensembles. Performing groups are open to all students

enrolled in the University and selection is determined by audition.

Students who specialize in music education elect either instrumental or choral emphasis. Upon completion of the requirements of the music education program, which includes the requirements of the State Board of Education, the student receives the Ohio Special Certificate for teaching music.

The Ohio University School of Music is a member of the National Association of Schools of Music. The requirements for entrance and for graduation are in accordance with the standards set up by the association.

The Athens Community Music School (ACMS), a unit within the School of Music, provides instruction for pre-college-age students, University students who are not music majors, and other adults. Private instruction is offered in all instruments and voice. Teachers in the ACMS include regular faculty members, graduate students, and advanced undergraduate students. Details are available from the director of the Athens Community Music School.

The School of Music offers an approved minor (30 hours minimum) in music. The minor may be earned by successfully completing the following courses: theoretical studies (9 hrs) — MUS\* 100, 101A, 102A; history and literature (9 hrs) — MUS 125 and two courses selected from MUS 322, 323, 427, 428; performance studies — major instrument (3 qtrs, 6 hrs), ensemble (3 qtrs, 3 hrs); and music electives (3 hrs).

Each music major is required to enroll in Performance Laboratory (MUS 90) and in an appropriate performing group with his or her major as outlined in the School of Music Handbook.

The following course plans outline a practical sequence of required courses which should be of assistance to the student in planning his or her course of study. All students must complete Tiers I, II, and III of the University General Education Requirement. (See Graduation Requirements.)

\*MUS 101, 102, 103 may be substituted with the approval of the School of Music Academic Studies Area Chairperson.

## ADMISSION REQUIREMENTS

All new students intending to major in music, both freshmen and transfer students, must audition on their major instruments or voice as part of the admission process. An appointment for an audition and information concerning proficiency requirements may be secured by contacting the director of the School of Music. Those students who are accepted but do not meet the required level of proficiency in their major instruments may be placed in small classes with students of comparable ability until the required level of proficiency is reached.

A music theory examination is required of all new students. This examination is given on freshman entrance audition days and at the beginning of each quarter. Specific times and locations for this examination may be obtained from the School of Music office.

## MAJOR AREAS AND REQUIREMENTS

### Major in Performance

#### Piano

(Major code #5100)

#### Freshman

INCO 101 .....	4
MUS 90 .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to History and Literature .....	3
MUS 341 Piano .....	12
Performance group .....	3
Tier I ENG, MATH .....	9-10
Electives .....	8-9

Sophomore	
MUS 90 .....	0
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6
MUS 321, 322, 323 Music History .....	9
MUS 341 Piano .....	15
Performance group .....	3

Junior	
MUS 90 .....	0
MUS 341 Piano .....	15
MUS 421C* Chamber Music Literature .....	3
MUS 450 Accompanying .....	3
MUS 497 Recital .....	1
English comp. (300 level) .....	4
Tier II electives (foreign language) .....	12
Theory electives .....	4-6
Performance group .....	3
Elective .....	3

Senior	
MUS 90 .....	0
MUS 341 Piano .....	18
MUS 458G, H, I Piano Pedagogy .....	6
MUS 421B* Piano Literature .....	3
MUS 497 Recital .....	2
Tier II electives .....	12-15
Tier III elective .....	4-5
Elective .....	3
Performance group .....	3

\*May be taken in either the junior or senior year

Minimum credit hours required for graduation: 192

### ***Piano with a Concentration in Pedagogy***

(Major code #5100)

Freshman	
INCO 101 .....	4
MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music Hist. and Lit. ....	3
MUS 341 Piano .....	12
Performance group .....	3
Tier I ENG, MATH (PHIL 120) .....	9-10
Electives .....	9

Sophomore	
MUS 90 Performance Lab .....	0
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6
MUS 321, 322, 323 Music History .....	9
MUS 341 Piano .....	12
MUS 370 Practicum .....	6
Performance group .....	3

Junior	
MUS 90 Performance Lab .....	0
MUS 341 Piano .....	12
MUS 458G, H, I Piano Pedagogy .....	6
PSY 101, 275 .....	9
Theory electives .....	6
Performance group .....	3
English composition (300 level) .....	4
Tier II elective .....	4-5
Elective .....	3

Senior	
MUS 90 Performance Lab .....	0
MUS 341 Piano .....	12
MUS 370 Practicum .....	6
MUS 421B Piano Literature .....	3
MUS 450 Accompanying .....	3
MUS 458E Class Piano Pedagogy .....	2
MUS 497 Recital .....	2
Performance group .....	3
Tier II elective .....	4-5
Tier III elective .....	4-5
Electives .....	6

Minimum credit hours required for graduation: 192

### ***Voice***

(Major code #5101)

Freshman	
ITAL 111, 112 .....	8
MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music Hist. and Lit. ....	3
MUS 340 Voice .....	12
MUS 341 or 141, 142, 143 Piano .....	6
MUS 375 Diction for Singers .....	1
Performance group .....	3
Tier I ENG, PHIL 120 .....	9
Elective .....	4-5

Sophomore	
GER 111, 112 .....	8
MUS 90 Performance Lab .....	0
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6
MUS 340 Voice .....	12
MUS 341 or 241, 242, 243 Piano .....	6
MUS 375 Diction for Singers .....	1
Performance group .....	3-6
Tier II elective .....	4-5

Junior	
FR 111, 112 .....	8
MUS 90 Performance Lab .....	0
MUS 321, 322, 323 Music History .....	9
MUS 340 Voice .....	12
MUS 375 Diction for Singers .....	1
MUS 457D Solo Repertoire .....	1
MUS 497 Recital .....	1
English composition (300 level) .....	4
Tier II electives .....	8-10
Music theory and literature elective .....	3
Performance group .....	3-11

Senior	
MUS 90 Performance Lab .....	0
MUS 340 Voice .....	12
MUS 375 Diction for Singers .....	1
MUS 421A Literature of Vocal Music .....	3
MUS 421F Literature of Opera .....	3
MUS 455, 456B Conducting .....	6
MUS 457D Solo Repertoire .....	2
MUS 458D Vocal Pedagogy .....	2
MUS 497 Recital .....	2
Music theory and literature elective .....	2-3
Performance group .....	3-12
Electives .....	10-11
Tier III elective .....	4-5

Demonstration of piano proficiency is required.

Minimum credit hours required for graduation: 208

### ***Organ***

(Major code #5102)

Freshman	
CA 117, 118 .....	8
INCO 101 .....	4
MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music Hist. and Lit. ....	3
MUS 343 Organ .....	12
Performance group .....	3
Tier I ENG, MATH .....	9-10

Sophomore	
MUS 90 Performance Lab .....	0
MUS 147, 148, 149 Class Voice .....	6
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6
MUS 321, 322, 323 Music History .....	9
MUS 343 Organ .....	12
Performance group .....	3

## Junior

MUS 90 Performance Lab .....	0
MUS 343 Organ .....	12
MUS 402A,B,C Styles .....	9
OR	
MUS 407A,B Counterpoint .....	9
MUS 455, 456A, 456B Conducting .....	9
MUS 497 Recital .....	1
Performance group .....	3
Music elective .....	3
Tier II electives .....	12-15
English composition (300 level) .....	4

## Senior

MUS 90 Performance Lab .....	0
MUS 343 Organ .....	18
MUS 421A Literature of Vocal Music .....	3
OR	
MUS 421D Literature of Orchestral Music .....	3
MUS 421C Literature of Chamber Music .....	3
OR	
MUS 421F Literature of Opera .....	3
MUS 421E Literature of Organ Music .....	3
MUS 497 Recital .....	2
Performance group .....	3
Tier II electives .....	8-10
Tier III elective .....	4-5
Minimum credit hours required for graduation: 193	

**Orchestral Instruments****Strings, Woodwinds, Brass, or Percussion**

(Major code #5103)

## Freshman

MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music Literature .....	3
Major instrument .....	12
MUS 341 or 141, 142, 143 Piano .....	6
Band/Orchestra .....	6
MUS 254* Chamber Music .....	3
Tier I ENG, PHIL 120 .....	9-10

## Sophomore

MUS 90 Performance Lab .....	0
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6
MUS 254 Chamber Music .....	3
MUS 321, 322, 323 Music History .....	9
MUS 341 or 241, 242, 243 Piano .....	6
Major instrument .....	12
Band/Orchestra .....	6

## Junior

Major instrument .....	12
MUS 90 Performance Lab .....	0
Music theory and literature electives .....	9
MUS 455, 456A Conducting .....	6
Band/Orchestra .....	6
MUS 254 Chamber Music .....	3
English composition (300 level) .....	4
Tier II electives .....	12
MUS 497 Recital .....	1

## Senior

Major Instrument .....	18
MUS 90 Performance Lab .....	0
MUS 457, 458 Solo Repertoire, Pedagogy .....	3
Band/Orchestra .....	6
MUS 254 Chamber Music .....	3
MUS 304 Instrumentation .....	3
MUS 497 Recital .....	2
Tier II electives .....	12-14
Tier III elective .....	4-5
Elective .....	3

\*12 quarters chamber music required for string majors; 9 quarters for other instrumentalists.

Minimum credit hours required for graduation: 207

**Major in Theory and Composition**

(Major code #5116)

**Program Requirements**

## Freshman

MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music Hist. and Lit. ....	3
Major instrument .....	6
Class Piano <sup>1</sup> .....	6
Performance group .....	3
Tier I ENG, MATH .....	9-10
INCO 101 .....	4
Electives .....	6-10

## Sophomore

MUS 90 Performance Lab .....	0
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6
Major instrument .....	6
Class Piano <sup>1</sup> .....	6
Performance group .....	3
Tier II electives .....	12-15

## Junior

MUS 90 Performance Lab .....	0
MUS 310, 311, 312 Composition .....	6
MUS 321, 322, 323 Music History .....	9
MUS 407A,B <sup>2</sup> Counterpoint .....	6
MUS 413A Intro to Electronic Music .....	2
MUS 415 Microcomputer Applications .....	3
Major instrument .....	6
Performance group .....	3
English composition (300 level) .....	4
Tier II electives .....	8-10

## Senior

MUS 90 Performance Lab .....	0
MUS 304, 305, 306 Instrumentation, Orchestration I, II .....	9
MUS 402A,B,C <sup>2</sup> Styles .....	9
MUS 410, 411, 412 <sup>4</sup> Composition .....	6
MUS 414 <sup>3</sup> Sr Practicum-Theory .....	2
MUS 421 electives .....	9
MUS 498 <sup>3</sup> Independent Project .....	4
Performance group .....	3
Tier III elective .....	4-5
Electives .....	6-10

<sup>1</sup>If piano is the major instrument, the secondary instrumental requirement may be satisfied by one of the following methods:

1. by taking applied lessons on an instrument other than piano for 6 quarters (1 hour per quarter)
2. by taking 3 quarters (2 hours per quarter) of either String Methods and Materials 261, or Wind and Percussion Methods and Materials 263, or a combination of both.

<sup>2</sup>May be taken in junior or senior year<sup>3</sup>Required of theory majors<sup>4</sup>Required of composition majors

Minimum credit hours required for graduation: 192

**Major in Music History and Literature**

(Major code #5114)

**Program Requirements**

## Freshman

MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music Hist. and Lit. ....	3
Major instrument .....	6
Minor instrument .....	3
Performance group .....	3
Tier I MATH, ENG .....	9-10
English electives .....	10
INCO 101 .....	4

## Sophomore

MUS 90 Performance Lab .....	0
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6



MUS 321, 322, 323 Music History .....	9
Major instrument .....	6
Minor instrument .....	3
Tier II electives .....	12-15
Performance group .....	3

## Junior

MUS 90 Performance Lab .....	0
MUS 421 electives .....	9
Theory electives .....	9
Modern languages .....	15
Major instrument .....	6
English composition (300 level) .....	4
History electives .....	8
Performance group .....	3

## Senior

MUS 90 Performance Lab .....	0
MUS 421 electives .....	9
Comparative arts electives .....	8-9
Modern languages .....	15
Major instrument .....	6
Tier II electives .....	8-10
Tier III elective .....	4-5
Minimum credit hours required for graduation: 202	

**Major in Music Education**

(Major code #5113)

**Program Requirements****Instrumental Emphasis**

## Freshman

INCO 103 .....	4
MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music Hist. and Lit. ....	3
Major instrument .....	6
Minor instrument .....	3-6
Performance group .....	3
MUS 163 Intro to Music Education .....	2
Tier I ENG, MATH electives .....	9-10
PSY 101 .....	5

## Sophomore

EDSE 250, 250L, 270, 270L .....	10
MUS 90 Performance Lab .....	0
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6
MUS 261 or 263 Instr. Meth. Classes .....	4
Major instrument .....	6
Minor instrument .....	3-6
Performance group .....	3
PSY 275 .....	4
Tier II electives .....	8-10

## Junior

EDSE 351 .....	5
EDSE 420, 420L .....	5
MUS 261 or 263 Instr. Meth. Classes .....	6
MUS 304 Instrumentation .....	3
MUS 322, 323 Music History .....	6
MUS 362 Teach. Instr. Mus. Elem., Middle School .....	3
MUS 363 Second. School Instr. Meth. and Mat. ....	3
MUS 455, 456A Conducting .....	6
MUS 464 Marching Band Techniques .....	2
Major instrument .....	6
Performance group .....	3
English composition (300 level) .....	4
Music Education elective .....	2

## Senior

EDCI 480, EDM 480A, EDCI 401 .....	7
EDPL 461, 463, 465 .....	16
MUS 90 Performance Lab .....	0
MUS 147, 148 Class Voice .....	4
MUS 261 or 263 Instr. Meth. Classes .....	4
MUS 413A Intro to Electronic Music .....	2
MUS 465 Jazz Ensemble Methods .....	2
Performance group .....	2
Music history elective .....	3

Tier III elective .....	4-5
Elective .....	2-5

Minimum credit hours required for graduation: 200

Demonstration of piano proficiency is required. See the School of Music Handbook for a complete statement concerning requirements.

**Choral Emphasis**

(Major code #5113)

## Freshman

MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 125 Intro to Music Hist. and Lit. ....	3
Major instrument .....	6
Minor instrument .....	3-6
Performance group .....	3
MUS 163 Intro to Music Education .....	2
INCO 103 .....	4
Tier I ENG, MATH .....	9-10
PSY 101 .....	5

## Sophomore

EDSE 250, 250L, 270, 270L .....	10
MUS 90 Performance Lab .....	0
MUS 201, 202, 203 Theory .....	9
MUS 204, 205, 206 Dictation and SS .....	6
MUS 283 Rec. Mus. Instr. and Mat. ....	3
Major instrument .....	6
Minor instrument .....	3-6
Performance group .....	3
PSY 275 .....	4
Tier II electives .....	8-10

## Junior

EDSE 351, 420, 420L .....	10
MUS 90 Performance Lab .....	0
MUS 261 or 263 Instr. Meth. Classes .....	4
MUS 322, 323, Music history elect. ....	9
MUS 364 Sec. Vocal Techniques .....	3
MUS 366 Teach. Mus. Elem. ....	3
MUS 455, 456B Conducting .....	6
MUS 468 Gen. Music in JHS .....	3
Major instrument .....	6
Performance group .....	3
English composition (300 level) .....	4

## Senior

EDCI 401, 480 .....	5
EDM 480A .....	2
EDPL 461, 463, 465 .....	16
MUS 261 or 263 Instr. Meth. Class .....	4
MUS 413A Intro to Electronic Music .....	2
Music theory elective .....	3
Music theory, history, education elective .....	3
Performance group .....	2
Tier III elective .....	4-5
Elective .....	5

Minimum credit hours required for graduation: 196

Demonstration of piano proficiency is required. See the School of Music Handbook for a complete statement concerning requirements.

**Major in Music Therapy**

(Major code #5115)

**Program Requirements**

## Freshman

EDSP 271 .....	3
MUS 90 Performance Lab .....	0
MUS 101, 102, 103 Theory .....	12
MUS 141, 142, 143 Class Piano* .....	6
MUS 180 MT Practicum I .....	1
MUS 181 Intro to Music Therapy .....	3
MUS 283 Rec. Mus. Instr. and Mat. ....	3
Major instrument .....	6
Performance group .....	3
PSY 101 .....	5
Tier I English Comp. ....	5

HSS 108 Intro Sp. Disord. ....	5
Dance elective .....	3

## Sophomore

EDSP Behavioral sci. elective .....	5
MUS 90 Performance Lab .....	0
MUS 125 Intro to Music Hist. and Lit. ....	3
MUS 147, 148, 149 Class Voice ** .....	6
MUS 165 or 166, Class Guitar .....	2
MUS 201, 202, 203 Theory .....	9
MUS 204, 205 Dictation and SS .....	4
MUS 241, 242, 243 Class Piano* .....	6
MUS 280 Music Therapy Practicum II .....	3
MUS 281 Obs., Eval., Res. in MT .....	3
MUS 282 MT Activ. for Classroom and Clinic .....	3
Major instrument .....	6
Performance group .....	3

## Junior

MUS 90 Performance Lab .....	0
MUS 261 String Meth. Class .....	2
MUS 322, 323 Music History .....	6
MUS 359, 360, 361 Class Piano, Organ, Piano elective .....	3-6
MUS 366 Teach. Mus. Elem. ....	3
MUS 380 MT Practicum III .....	3-6
MUS 381, 382 Psy. Found. Mus. I, II .....	6
MUS 481 MT Prin. and Tech. I .....	3
MUS 455 Conducting .....	3
Music education, theory, or history elective .....	3
English composition-technical writing (300 level) .....	4
Elective .....	2
PSY 121, Statistics .....	5
PSY 332 Abnormal .....	4

## Senior

EDSP Behavioral sci. elective .....	10
MUS 90 Performance Lab .....	0
MUS 263 WW, Brass, Perc., Meth. Class .....	6
MUS 480 MT Practicum IV .....	3-6
MUS 482, 483 MT Prin. and Tech. II, III. ....	6
MUS 489 Clin. Training in MT .....	1
ZOOL 101, 301 .....	11
Tier III elective .....	4
Electives .....	8

\*Non-piano majors only

\*\*Non-vocal majors only

Minimum credit hours required for graduation: 203

The music therapy curriculum is designed to meet the degree requirements of the School of Music and the National Association for Music Therapy (NAMT).

In addition to the regular coursework, the student must complete the required course MUS 489, Clinical Experience (six-month internship) at an approved clinical training facility for the training of music therapists before graduation. Upon graduation, the student is eligible for listing with NAMT as a registered music therapist (RMT).

## B.F.A. with Dual Emphasis

### Music Emphasis

Students who wish to pursue an emphasis in music are required to audition on an instrument or voice as part of the admission process. In addition, students must complete the core sequence of music courses prior to admission to the B.F.A. with dual emphasis program.

### Program Requirements:

MUS 101, 102, 103 Theory .....	12
MUS 201, 202, 203 Theory .....	9
MUS 204, 205 Dictation and S.S. ....	4
Music History Electives .....	12
Major Instrument* .....	12
Performing Group (minimum of 6 quarters) .....	6-12
Music Electives (300-400 level) .....	8

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## Minor in Music

### Theoretical Studies

MUS 100, 101A, 102A, Music Theory* .....	9
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### History and Literature

MUS 125 Intro to Music Hist. and Lit. ....	3
Two courses selected from the following:	
MUS 322, 323 Music History .....	3, 3
MUS 427 Folk Music .....	3
MUS 428 Jazz History .....	3

### Performance Studies

Applied music (3 quarters) .....	6
Ensemble (3 quarters) .....	3
Electives (any course or courses in music totaling a minimum of 3 credit hours) .....	3
Minimum hours required .....	30

\*MUS 101, 102, and 103 may be substituted providing the student achieves a satisfactory score on the Freshman Music Theory Entrance Examination and has the approval of the music theory chairperson.

## SCHOOL OF THEATER

Kathleen F. Conlin, *Director*

The undergraduate theater experience at Ohio University is a blend of intensive training in a selected area of concentration, core theater studies, and liberal arts experiences leading to a professionally oriented Bachelor of Fine Arts degree.

The theater is not an island unto itself; it exists as a part of and because of a larger world. For this reason, advisors in the School of Theater strive to help theater majors satisfy the general University liberal arts requirements in a manner that encourages them to understand and contribute to the larger world. In addition, all undergraduate majors devote a portion of their theater studies to an examination of the literature and history of theater, the role of theater in society, and the relationship of theater to other art disciplines.

Production activities in the School of Theater are considered essential to the total curriculum planning of a major. Majors register each quarter for a credited production assignment. Students in the first year of training participate in productions through technical and management assignments, while second-, third-, and fourth-year students have opportunities to participate as performers, advanced technicians, designers, and managerial assistants.

Ongoing individual advising between the student and his or her faculty advisor is an extremely important aspect of the training programs in the School of Theater. Students' progress is evaluated quarterly by the advisor and faculty in the training area. At the end of any quarter, if progress is considered unsatisfactory, the student may be placed on probation, recommended for transfer to another sequence or degree within the school, required to modify his or her program, or denied further enrollment as a degree candidate in the School of Theater.

Other specific requirements and expectations relating to production and curriculum are distributed to all incoming students upon their arrival. A minor or second major is possible in some cases if the student has utilized careful advising procedures and made intelligent use of all elective and University General Education course options. In addition, highly motivated and talented students can pursue their degree work in the School of Theater through the Honors Tutorial College, if the tutorial mode of instruction is appropriate for the individual student.

## ADMISSION REQUIREMENTS

All majors in the School of Theater audition and/or interview for one of three training areas: actor training, production design and technology, or theater arts and drama. Early application and audition/interview appointments are encouraged due to limitations in the number of students admitted to each program. *Auditions and interviews for scholarship consideration are conducted during the fall quarter of each year for students considering entrance the following year.*

## MAJOR AREAS AND REQUIREMENTS

The following information will help to define the various requirements of the School of Theater and will provide specific descriptions of the three degree options.

### Theater Core Courses

(Required of all majors)

THAR 101, 102, 103 Intro and Orientation to the Theater as a Profession .....	3
THAR 110 or 110Y Intro to Performance .....	4
THAR 172 Elements of Performance .....	3
THAR 130 Intro to Stagecraft .....	3
THAR 131 Intro to Lighting .....	3
THAR 132 Intro to Costume .....	3
THAR 210 or 210Y Acting I .....	4
THAR 211 or 211Y Acting II .....	4
THAR 270, 271, 272 Theater History I, II, and III .....	12
THAR 320 Directing I .....	4
Two seminar courses from the THAR 470 series .....	8
Practicum: All majors are required to enroll in a minimum of one 2 credit practicum per quarter of residence .....	24
All majors are required to enroll for Lunchbag Theater Seminar each quarter of residence.	
Total .....	75

### Liberal Arts Requirements for Theater Majors

In addition to the Tier I, II, and III requirements, all majors in the School of Theater are required to take two English courses at the 200 level or above. Two Shakespeare courses are strongly advised and may be required in a specific program requirement.

### Electives

Distribution of elective hours will vary depending upon degree requirements of a particular area. All students are encouraged to utilize their elective choices in a manner that expands upon the liberal arts experience, particularly with choices in the areas of literature, philosophy, history, and psychology. Students in acting also are advised to strengthen their personal talents in the areas of music, dance, and art.

### Acting Major

(Admission by audition and interview only)

The B.F.A. in acting is offered to a limited number of incoming freshmen and second-year transfers (fall quarter only) who demonstrate potential for a performance career. The acting program integrates three fundamental elements of actor training: (1) a structured, intensive sequence of actor training, (2) a strong background in general theater studies, (3) a foundation in liberal arts. The B.F.A. is a specialized degree that requires mastery of significant skills and a major commitment to class and laboratory activities.

The actor training element of the curriculum provides eleven quarters of acting (including improvisation, text analysis, scene work, and rehearsal process) and eight quarters each of voice and movement for the stage (including physical/vocal characterization and scansion).

The B.F.A. curriculum trains and prepares the acting student to pursue a career in professional theater or to enter graduate-level professional studies. Students develop vocal, physical, and imaginative capabilities; learn a process of approaching a role; and strengthen working techniques. In the B.F.A. Program, students receive constant exposure to the techniques of audition and self-presentation and to the acting process. The key is a close advisor-student relationship.

There is constant communication among the acting faculty to evaluate and advance the training of the individual student. At the end of every quarter, the acting faculty meets with each student to determine his or her progress and specify areas of strength and weakness in technique. Students who show consistent progress are invited to continue in the program. A student who is struggling academically, programmatically, or personally will be placed on a probationary status. At the end of the first academic year, students are asked to re-audition for the program. At the end of the second year of training, all students are re-evaluated, and those who continue to improve and show potential for a professional career will be asked to continue for the final two years of training.

The B.F.A. acting curriculum begins in the first quarter of the freshman year. There is no casting of freshmen during the first year or of transfer students during their first quarter to allow faculty time to diagnose and address the needs of each student and to build a foundation for training. Thereafter, the school's mainstage productions and laboratory theater offerings provide opportunities to apply the class work to actual roles. In addition, through coursework with the M.F.A. directing students, B.F.A. actors are ensured performance opportunities in the second, third, and fourth years of study. There is also an opportunity to audition for Ohio University's Monomoy Theater on Cape Cod.

In addition to University and Theater core requirements, students majoring in the actor training area are required to complete the following curriculum:

#### First Year:

THAR 111 Improvisation I .....	2
THAR 112 Intro to Voice and Movement .....	2

#### Second Year:

THAR 212 Acting III .....	4
THAR 216A, B, C Body Training .....	6
THAR 217A, B, C Voice Training .....	6
THAR 237 Basic Makeup .....	1

#### Third Year:

THAR 310 Audition Tech. and Pract. ....	3
THAR 311 Improvisation II .....	3
THAR 312 Scene Study I .....	2-4
THAR 316A, B, C Stage Movement .....	9
THAR 317A, B, C Stage Voice .....	9

#### Fourth Year:

THAR 410 Scene Study II .....	2-4
THAR 411 Acting IV .....	3
THAR 412 Television Performance .....	3
THAR 416 Advanced Stage Movement .....	2
THAR 417 Advanced Voice Training: Dialects, Scansion .....	2
Total .....	59-63

Practicum: acting majors are required to complete their practicum requirement in THAR 415 in the 4th year of training.

## Theater Arts and Drama

(Interview required for admission)

Theater arts and drama is a unique program providing a liberal arts education in theater studies. This program is for students who want a more flexible education than what is offered through the other programs. Theater arts and drama provides the student with a comprehensive education in theater and the liberal arts, and areas of specialization. These specializations include, among others, directing, playwriting, theater history and dramatic literature, theater education, theater and stage management, and performance. It is also possible for the student, in consultation with the advisor, to design a unique, interdisciplinary program around the student's interests. Each student's individual program is developed by the student and the advisor. Careful supervision and advising of each student is an integral part of the program. Finally, theater arts and drama ensures that a student will have a diversified education in disciplines related to theater and an opportunity to explore educational interests throughout the University. This program is, therefore, an excellent foundation for a more specialized education, whether in professional work or graduate school.

In addition to University and theater core requirements, students majoring in theater arts and drama are required to complete three Theater Arts and Drama Workshops (THAR 179, 279, 379).

To ensure a diversified and wide-ranging education, students are required to complete at least 9 credit hours in each of the following areas: literature, fine arts, social studies, and history. Tier II classes can be counted toward meeting these requirements. Theater arts and drama majors are required to select Shakespeare courses to satisfy the theater core requirement of two English courses above the 200-level.

At the end of the first year of training, each student will declare a primary and secondary area of concentration. An individual course of study, comprising the student's degree requirements, will then be developed in consultation with the advisor. This program must contain a minimum of 43 credits of theater courses. Careful supervision and advising of each student is, therefore, an integral part of the program. At the end of each quarter, each student will take part in an evaluation to determine how the student's course of study should best be continued.

## Production Design and Technology

(Interview and portfolio review are required for admission)

The B.F.A. in production design and technology is available with an emphasis on the environmental aspects of performance. Design and technology in scenery, costumes, lighting, properties, sound, and makeup are taught in a series of courses and special projects throughout the four-year curriculum. Productions are prepared under the close personal advisement and participation of the production faculty and staff. Qualified students are challenged with major creative responsibilities.

In addition to University and theater core requirements, students majoring in production design and technology are required to complete the following:

THAR 230 Stagecraft: Scenery .....	3
THAR 231 Stagecraft: Lighting .....	3
THAR 232 Stagecraft: Costume .....	3
THAR 233 Theatrical Design Skills .....	3

At least two of:

THAR 331 Theory of Lighting .....	4
THAR 332 Costume Design I .....	4
THAR 334 Scene Design .....	4

At least one of:

THAR 338 History of Costume .....	4
THAR 438A Historical Bases of Design I .....	4
THAR 438B Historical Bases of Design II .....	4

At least one of:

THAR 431 Lighting Design II .....	4
THAR 432 Costume Design II .....	4
THAR 434 Scene Design II .....	4

In addition, a minimum of fifteen credits selected from production design and technology classes numbered 300 and above, or areas related to production design and technology approved by the advisor.

Total ..... 43

## B.F.A. with Dual Emphasis

### Theater Emphasis

Students who are eligible for the B.F.A. with Dual Emphasis and desire a theater emphasis must be auditioned or interviewed by the appropriate faculty within the school. A minimum of 69 hours is required, depending on area of concentration.

### Theater Core

THAR 101, 102, 103 .....	3
THAR 110 or 110Y .....	4
THAR 130 .....	3
THAR 131 .....	3
THAR 132 .....	3
THAR 172 .....	3
THAR 210 or 210Y .....	4
THAR 270 .....	4
THAR 271 .....	4
THAR 272 .....	4
Practicum (6 qtrs in 4 yrs.) .....	10
	45

In addition to theater core requirements, students choose one concentration from the following:

### Acting

THAR 211 .....	4
THAR 212 .....	4
THAR 216A, B, C .....	6
THAR 217A, B, C .....	6
THAR 311 .....	3
Senior Project** .....	4

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## Theater Arts and Drama

This theater area is designed to serve the needs of theater majors and B.F.A. degree candidates with generalist interests in theater or specific interests where a general knowledge of theater and allied fields is required. This includes stage managing, directing, playwriting, dramaturgy, teaching, arts administration, etc. Course and practicum selections in this area are highly individualized.

Credit Total (incl. Senior Proj.\*\*\*) ..... 24

## Production Design and Technology Concentration

At least two of:

THAR 230 Stagecraft: Scenery .....	3
THAR 231 Stagecraft: Lighting .....	3
THAR 232 Stagecraft: Costume .....	3
THAR 233 Theatrical Design Skills .....	3

At least two of:

THAR 331 Theory of Lighting .....	4
THAR 332 Costume Design I .....	4
THAR 334 Scene Design .....	4

Theater electives (with at least 4 credits at the 400-level; other than practicum) ..... 12

Senior project\*\* is an option, and would be included among the electives.

Total ..... 26

\*\*The Senior Project is particular to this degree and is intended to serve as a focal point for the student's studies in the School of Theater. The project may take the form of a one person performance, a specific design project, or internship.

## Minor in Theater

### Required Core Courses:

THAR 110 or 110Y .....	4
THAR 172 or 170 .....	3-4
Practicum .....	6

(minimum of 3 experiences; at least 1 in PD&T or Mgt)

Total Required Core: ..... 13-14

At Least 1 Course (Not Less Than 3 cr) In Each of the Following Groups:

1. THAR 130, 131, 132 .....	3
2. THAR 210 or 210Y; 218A, B, C; 179, 279, 379 .....	4
3. THAR 270, 271, 272; 470 series .....	4

TOTAL REQUIRED GROUPS: ..... 11

### Electives:

MINIMUM ELECTIVES ..... 5-6

(chosen from any available course in the School of Theater)

TOTAL ..... 30

## SCHOOL OF VISUAL COMMUNICATION

Charles L. Scott, *Director*

Terrill E. Eiler, *Associate Director*

The College of Fine Arts, in conjunction with the College of Communication, offers a visual communication degree program with specialized sequences. The school has been recognized twice by the Ohio Board of Regents as a Program of Excellence. Students can earn either a Bachelor of Fine Arts degree or a Bachelor of Science in journalism degree.

The program is designed to provide students with realistic and thorough, broad-based, professionally oriented training in visual communication and journalism, while providing the liberal arts and cultural background necessary for a quality educational foundation.

Intensive training is offered in picture editing/page design, photo communication for newspapers and magazines, photo illustration and advertising photography, and multi-media.

## GOALS OF THE SCHOOL

The goals of the School of Visual Communication are (1) to equip students with the necessary skills to be successful in the media; (2) to motivate students to compete for eventual leadership roles in the field; (3) to provide assistance and professional guidance in visual communication to working photographers, editors, and other personnel; newspapers, press services, magazines, industrial photographic departments, trade associations, multi-media and educational media production units; and cultural and scientific visual communicators; (4) to set high standards for visual integrity and communication ethics; and (5) to foster and promote scholarly research.

## INTERNSHIPS

In an effort to provide practical training, students are required to have at least one paid internship for a period of ten weeks during their college careers. Any qualified

student may compete for an internship. Many students have several internships before graduation. In recent years, Ohio University visual communication students have worked on paid internships at newspapers and magazines in the areas of advertising, photo illustration, and audio-visual production. The internships have been in Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and the District of Columbia. Students also have worked on internships overseas in France, Japan, and Norway.

Ohio University visual communication students are active members of the Ohio News Photographers Association and other state press photographers' groups and are student members of the National Press Photographers Association, the Society for Newspaper Design, and the American Society of Magazine Photographers. Many Ohio University students have been successful in state and national photography competitions. They have done particularly well in the annual William Randolph Hearst Foundation photojournalism competition which is open only to students taking photojournalism courses in any of the more than 80 participating colleges and universities.

## ADMISSION REQUIREMENTS - B.F.A.

The School of Visual Communication admits only the best academically and professionally qualified students. These students normally rank in the top quarter of their high school classes, though students with lower class rankings are considered if they have outstanding SAT or ACT scores. In addition, students who demonstrate notable talent or experience or have been historically underrepresented in the school will be given special consideration for admission.

All students planning to become visual communication majors should enroll directly as visual communication majors entering the School of Visual Communication (major code #6900).

## Transfer Students

This program sets high academic and professional standards, and enrollment is limited. All students wishing to transfer into the school must have earned at least 48 quarter hours (32 semester hours) with a grade-point average of 2.5 or higher.

Students who may receive additional consideration include those with demonstrated professional talent or experience, and/or those coming from historically underrepresented groups.

These requirements apply to students transferring from other universities, from other programs within Ohio University, or from one program to another within the College of Fine Arts.

Transfer students may submit portfolios to the School of Visual Communication after having completed approximately 40 quarter hours of coursework for placement in major classes. A comprehensive selection of courses at the freshman level familiarizes students with basic visual concepts and provides initial experience in a variety of specific study areas. Visual communication students will submit portfolios for admission to ART 295, Intermediate Photography.

Prior to the junior portfolio review (third quarter of the sophomore year), students will have completed freshman core courses (ART 100, 101, 192, 151, or 102), three courses in the major area, and three studio electives. The visual communication faculty will evaluate portfolios and recommend whether or not students will be accepted into the

major area of study. Students who are not accepted may reapply or select another area in which to present a portfolio. A form will be placed in each student's file indicating the result of the portfolio review.

A student must be enrolled one academic year (three consecutive quarters) or the final 48 quarter hours in the school to earn a degree.

## MAJOR AREAS AND REQUIREMENTS

### General Requirements - B.F.A.

School of Visual Communication majors are required to meet all the General Education Requirements of Ohio University, including Tier I, Tier II, and Tier III. In addition, visual communication students must meet the requirements established by the School of Art and the School of Visual Communication.

### Visual Communication Core Requirements

All visual communication fine arts majors complete a basic core of courses:

ART 100 Seeing and Knowing the Visual Arts	3
ART 101 or 151	4
ART 102	4
ART 192 Basic Photo	4
and one from the following list: ART 102, 128, or 151	4
AH 307 History of Photography	4
JOUR 221 Graphics	5
JOUR 231 News Reporting	4
JOUR 235 Picture Editing	3
JOUR 411 Communication Law	4
VICO 120 Intro to Visual Communication	4
VICO 121 Delivery Systems	4
VICO 220 Topic Semtnar	2-4

### Art History Requirements

AH 211 History of Art	4
AH 212 History of Art	4
AH 213 History of Art	4
AH 308 History of Photography	4
AH 309 History of Photography	4

### Studio Arts (45 hours)

In addition to the visual communication core of ART 100, 101, 192, and 151 or 102, visual communication majors are required to complete an additional 30 hours of studio arts or *advisor approved* visual communication courses. These courses should be 200 level or above in any class listed in art except those within the photography area.

ART 490 Practicum (required and counts towards studio arts) ... 3

### Photographic Foundation Requirements

ART 295 Intermediate Photography	5
ART 296 Intermediate Photography	5
ART 297 Intermediate Photography	5

### Standards

1. An average grade of B in VICO 120, 121, and 220.
2. Students must earn a grade of at least C in JOUR 221, 231, 235, 411, ART 397, and all professional major courses to graduate.
3. All students are required to pass the School of Journalism English Proficiency Test. Students must pass the test to qualify to take any journalism course except JOUR 105, 221, and 250. Students are urged to take the exam as freshmen. The proficiency test may be taken no more than three times. Passing score for this test is 75. Any student who fails to pass on the first effort will be permitted to retake the exam later. Passing scores on retake examinations are 75 for sophomores and 80 for juniors and seniors.

4. To qualify for admission to JOUR 231 students must achieve at least 25 words per minute on a typing examination administered on the first day of the class.
5. No professional course may be taken more than twice.
6. A student may not enroll in more than one photography course during any given quarter without written permission from the student's advisor.
7. Students must pass a portfolio review at the end of ART 397 to qualify for advancement.

## Visual Communication Requirements

### Picture Editing/Page Design

ART 397 Photo Comm	5
JOUR 336 Adv. Pict. Edit	3
JOUR 412 Mass Media & Soc.	3
VICO 323 Publ. Layout and Design	3
VICO 426 Adv. Publ. Layout and Design	3
Photo art, photo communication, photo illustration, or visual communication upper division courses as electives	25
total sequence requirements	42

### Photo Communication

ART 387 or 389	5
ART 397 Photo Communication	5
ART 398 Photo Communication	5
ART 399 Photo Communication	5
ART 494 Adv. Publ. Photo	5
JOUR 412 Mass Media & Soc.	3
Photo art, photo communication, photo illustration, or visual communication upper division courses as electives	5
total sequence requirements	36

### Photo Illustration

ART 387 Photo illustration Fashion	5
ART 388 Photo Illustration Production	5
VICO 427 Adv. Photo illustration	5
VICO 428 Adv. Photo illustration	5
VICO 429 Adv. Photo illustration	5
Photo art, photo communication, photo illustration, or visual communication upper division courses as electives	5
total sequence requirements	30

### Multi-Media

ART 389	5
ART 397 Photo Communication	5
ART 398 Photo Communication	5
ART 399 Photo Communication	5
TCOM 200A Prod. Writing/Planning	4
TCOM 200B Audio Prod.	4
TCOM 200C Video Prod.	4
Photo art, photo communication, photo illustration, or visual communication upper division courses as electives	10
total sequence requirements	42

### Informational Graphics

ART 250 Graphic Design Princ.	4
ART 251 Typography	4
ART 254 Lettering	4
JOUR 336 Adv. Picture Ed	3
VICO 311 Info. Graphics	5
VICO 323 Publ. Layout and Design	3
VICO 426 Adv. Publ. Layout and Design	3
Visual communication, photography, and art upper division courses as electives	19
total sequence requirements	45



# College of Health and Human Services

Barbara Chapman, *Dean*  
Lee Cibrowski, *Associate Dean*

## THE COLLEGE

Established by the Board of Trustees in 1979, the College of Health and Human Services is made up of the School of Health and Sport Sciences, the School of Hearing and Speech Sciences, the School of Home Economics, the School of Nursing, and the School of Physical Therapy. To provide students with a variety of local clinical education opportunities, the schools operate the Speech and Hearing Clinic, the Child Development Center, the Independent Living Skills Center, Therapy Associates, the Aquatic Center, the Golf Course, and Bird Arena.

The mission of the College of Health and Human Services is to promote an environment within which students may pursue undergraduate and graduate degrees in health and human services fields. Programs within the college combine academic coursework with practical field and clinical experiences providing students with basic knowledge, intellectual skills, and professional capabilities which enable the graduate to think and act positively and creatively in the face of ever-changing societal and human conditions.

The purposes of the College of Health and Human Services are:

1. To offer interdisciplinary programs designed for professionals with career objectives in the health and human services fields. The programs are oriented toward working with people with needs typically related to such areas as aging, day care, mental health, developmental disabilities, rehabilitation, nutrition, the family, environmental concerns, social welfare, justice, adolescence and youth, and the management of human and economic resources.
2. To promote interdisciplinary research and development activities to expand the knowledge base in the health and human services fields and to disseminate information useful to theory and practice.
3. To develop effective outreach programs which contribute to the continuing education of professionals and enhance the health care and human services provided to the people in the region and the state of Ohio.

## DEGREES AND REQUIREMENTS

The College of Health and Human Services offers curricula leading to a Bachelor of Science degree in environmental health, health, hearing and speech sciences, home economics, nursing, physical education, physical therapy, recreational studies, and sport sciences.

Graduate programs also are available in the schools of Health and Sport Sciences, Hearing and Speech Sciences, and Home Economics. All programs are described in detail in the *Ohio University Graduate Catalog*.

Each candidate for a degree in the College of Health and Human Services must earn 192 quarter hours of credit with a minimum total point-hour ratio of 2.0 (C average) and complete the major program requirements. Students who are pursuing teacher certification must meet the criteria for admission to teacher education established by the College of Education (see Admission to Professional Education in the College of Education section for further information). Students wishing to transfer into the College of Health and Human Services from other Ohio University colleges must have an accumulative grade-point average of 2.0. Some major programs such as athletic training, nursing, and physical therapy have unique entrance requirements in addition to those required for admission to Ohio University. These and other specific program requirements will be found in the description of each school on the following pages.

## ADVISING

A student entering the College of Health and Human Services is assigned a major advisor who is a faculty member in the school in which the major program resides. Faculty advisors assist students in the preparation of schedules and are available to discuss academic and career related topics. However, the student is responsible for completing all University, college, and school requirements for the degree.

## GERONTOLOGY

The colleges of Arts and Sciences and Health and Human Services jointly sponsor the undergraduate Gerontology Certificate Program for students in any major program within the University who want to gain knowledge and skills for a career in working with the elderly.

### Program Requirements

Students will complete at least 28 credit hours from the following specified list of courses including an approved practicum, field experience, or internship. The required "gerontology oriented" practicum, field experience, or internship cannot contribute more than 5 credit hours to the total 28 hours required for the certificate.

HECF 380 Death and Dying .....	4
HECF 462F The Aged Family .....	2
HLTH 302 Long-Term Care Administration I .....	4
HLTH 303 Long-Term Care Administration II .....	4
HLTH 413 Health Aspects of Aging .....	3

HSS 300 Disorders of Communication in the Elderly .....	3
NBSP 475 Gerontic Nursing .....	5
PSY 374 Psychology of Adulthood and Aging .....	4
SOC 334 Sociology of Aging .....	4
SW 381 Counseling Older Adults .....	4
SW 395 Aging in the Welfare State .....	4
Others with prior approval by program director	

#### Practicum/Field Experience Options:

HECF 499 Field Experience—Child & Family Living .....	5-12
HLTH 364 Community Health Field Experience .....	5
HLTH 464 Community Health Services Practicum .....	15
HLTH 480 Practicum in Health Services Administration I ....	15
HLTH 481 Practicum in Health Services Administration II ...	10
SW 490A Social Work Practice .....	8
Others with prior approval by program director	

A Gerontology Certificate is awarded upon completion of the requirements and a notation of the award is recorded on the permanent record (transcript). Students seeking the certificate must consult with the director to ensure that the certificate will be awarded. For more information on course offerings or other concerns, contact the director of the Gerontology Certificate Program.

## SCHOOL OF HEALTH AND SPORT SCIENCES

James Lavery, *Director*

The School of Health and Sport Sciences offers the following curricula:

### HEALTH SCIENCES

#### Athletic Training

- Community Health Services
- Exercise Physiology
- Health Education
- Community Health Services
- Health Services Administration
- Long-Term Health Care

- Environmental Health Sciences
- Health Education (Teaching Certification Program)
- Industrial Hygiene

### PHYSICAL EDUCATION

(K-12 Teaching Certification Program)

### SPORT SCIENCES

- Aquatic Management
- Coaching
- Exercise Physiology
- Sport Industry
- Sport for Special Populations
- Youth Sports

### RECREATION STUDIES

- Outdoor Education
- Recreation Management
- Special Interests
- Therapeutic Recreation
- Wilderness Skills

Upon satisfactory completion of the requirements in the major programs in the school, students may apply for the appropriate Bachelor of Science degree in environmental health, health, physical education, recreation studies, or sport sciences. Candidates for any of the degrees must fulfill the University General Education Requirements (see General Education Requirements section of this catalog) and must complete a minimum of 192 hours. An accumulative grade-point average of 2.0 (C) is required on all hours

attempted. Some programs have additional criteria that must be met. Students who are pursuing teacher certification must meet the criteria for admission to teacher education established by the College of Education (see Admission to Professional Education in the College of Education section for further information). A minor concentration is offered in both physical education and health education.

The school also offers the Master of Science degree in physical education, physiology of exercise, Master of Health Services Administration, and the Master of Sports Administration.

## HEALTH SCIENCES

### Athletic Training

Selected admission to this major is gained through the Athletic Training Department. Students selected to participate in this program must complete a minimum of 800 hours of clinical experience between the sophomore and senior years. Successful completion of the program qualifies the student to take the National Athletic Trainer's Association, Inc. Certification Examination. Upon successful completion of the requirements of any of the three athletic training options, students may apply for the Bachelor of Science in health.

Most athletic training courses are open to students not enrolled as majors in the Athletic Training Program. Students must meet the prerequisites or see the instructor for permission to enroll.

To create career options, the athletic training major is designed to be combined with a variety of health-related specializations.

#### Admission to the Program

Selected admission to the curriculum is gained through an on-campus interview and the completion of curriculum application materials, in addition to the regular University application materials, before February 1 of each year. For more information on how to apply, Contact the Athletic Training Academic Program, P.O. Box 689, Ohio University, Athens, Ohio 45701-0689.

### Program Requirements

#### Foundation Courses

HLTH 202 Health Sciences & Lifestyle Choices .....	4
HLTH 379 Teaching of Health .....	5
OR	
HLTH 430 Worksite Health Promotion .....	4
PHYS 201, 202 Introduction to Physics .....	8
PSY 101 General Psychology .....	5
PSY 121 Elem Statistics for Behavioral Sciences .....	5

#### Athletic Training Core Courses

HEFN 128 Intro to Nutrition .....	4
HLTH 204 Drugs, Alcohol, & Tobacco .....	3
HLTH 227 First Aid .....	3
HLTH 228 CPR .....	1
HPES 302 Biomechanics .....	4
HPES 333 Theory of Adapted Activities .....	3
HPES 414, 415 Physiology of Exercise & Lab .....	6
HSAT 129 Introduction to Athletic Training .....	3
HSAT 131 Practical Aspects of Athletic Training .....	2
HSAT 326 Recog/Eval. of Athletic Injuries .....	3
HSAT 327 Preven/Mgt. of Athletic Injuries .....	3
HSAT 335 Therapeutic Modalities .....	5
HSAT 360 Therapeutic Exercise .....	5
HSAT 420 Administration of Athletic Training .....	3
ZOOL 301 Human Anatomy .....	6
ZOOL 345 Human Physiology .....	4

In addition to the courses above, students must select at least one area of specialization listed below. Students

should work closely with their advisor to ensure the best possible match between their selected area of specialization and their future career goals.

### Community Health Services

(Major code #8126)

BUSL 360 Law and Health Care .....	4
EDCI 275 Learning Processes in Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDM 480 Intro to Educational Media .....	4
EH 260 Intro to Environmental Health & Safety .....	4
HLTH 101 Intro to Health & Human Services .....	3
HLTH 301 Intro to Health Care Organizations .....	4
HLTH 327 Instructor First Aid .....	3
HLTH 328 Instructor CPR .....	2
HLTH 390 Community Health .....	4
HLTH 402 Contemporary Problems in Health Care .....	4
HLTH 413 Health Aspects of Aging .....	3
HLTH 425 Controlling Stress & Tension .....	2
HLTH 427 Health of Women .....	3
HLTH 495 School Health Problems .....	5
SOC 231 Sociology of Health & Health Care .....	4
OR	
SW 290 American Social Welfare System .....	4

### Exercise Physiology

(Major code #8117)

CHEM 121, 122, 123 Principles of Chemistry .....	12
OR	
CHEM 151, 152, 153 Fundamentals of Chemistry .....	15
HPES 105 Conditioning & Organic Efficiency .....	2
HPES 106 Intro to Human Movement .....	2
HPES 417 Exercise Prescription .....	4
MATH 113 Algebra .....	5
OR	
MATH 163A Intro to Calculus .....	4
ZOOL 170 Intro to Zoology .....	5
ZOOL 171 Intro to Zoology .....	5

### Health Education

(Major code #8127)

#### General Education

(See Required General Education Courses listed under Health Education in this catalog)

#### Foundations of Health

HECF 360 Human Sexuality .....	3
OR	
ZOOL 103 Human Biology .....	5
HLTH 101 Intro to Health & Human Services .....	3
HLTH 390 Community Health .....	4
HLTH 495 School Health Problems .....	5
HPES 390 Safety Education .....	4
HPES 409 Tests & Measurements .....	4
MICR 211, 212 Environmental Microbiology & Lab .....	6

#### Professional Education Requirements

EDCI 275 Learning Processes in Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDCI 401 Advanced Urban Field Experience .....	2
EDCI 480 Teacher, School & Society .....	3
EDM 480A Intro to Educational Media .....	2
OR	
EDM 480 Intro to Educational Media .....	4
EDPL 463, 464 Student Teaching .....	13
EDPL 465 Student Teaching Seminar .....	3
EDSE 250, 250L Anal Teach Charact & Teach Tasks & Lab ....	6
EDSE 270, 270L Studies of Learn: Devel & Except & Lab .....	4
EDSE 351 Instr. Proc. and Curr. ....	5
EDSE 420, 420L Teach. Reading in Content Area .....	5

### Community Health Services

(Major code #8105)

This program provides students with background courses and field experiences which qualify them for positions in community health. A Bachelor of Science in health will be awarded to those students completing any of the prescribed courses of study.

#### Foundations of Health

EH 260 Intro to Environmental Health & Safety .....	4
HECF 360 Human Sexuality .....	3
OR	
ZOOL 103 Human Biology .....	5
HEFN 128 Intro to Nutrition .....	4
HLTH 101 Intro to Health and Human Services .....	3
HLTH 202 Health Sciences & Lifestyle Choices .....	4
HLTH 204 Drugs, Alcohol, and Tobacco .....	3
HLTH 227 First Aid .....	3
HLTH 228 CPR .....	1
HLTH 327 Instructor First Aid .....	3
HLTH 328 CPR Instructor .....	2
HLTH 390 Community Health .....	4
MICR 211, 212 Environmental Microbiology & Lab .....	5
MICR 418 Epidemiology .....	4
ZOOL 301 Human Anatomy .....	6
ZOOL 345 Human Physiology .....	4

#### Community Health Professional Education

EDCE 440 Foundations in Group Dynamics .....	4
OR	
INCO 205 Group Discussion .....	4
EDCI 275 Learning Processes in Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDM 480 Intro to Educational Media .....	4
HLTH 364 Community Health Field Experience .....	2
HLTH 379 Teaching of Health .....	5
HLTH 464 Community Health Services Practicum .....	15
HLTH 495 School Health Problems .....	5
HPES 409 Tests & Measurements .....	4

#### Health Science Core

Students are required to select a minimum of 20 hours in health sciences from the following courses:

BUSL 360 Law and Health Care .....	4
BUSL 370 Environmental Law .....	4
EDCE 410 Human Relations .....	3
HLTH 301 Intro to Health Care Organ. ....	4
HLTH 402 Contemporary Problems in Health Care .....	4
HLTH 413 Health Aspects of Aging .....	3
HLTH 425 Controlling Stress & Tension .....	2
HLTH 427 Health of Women .....	3
HLTH 430 Worksite Health Promotion .....	4
HLTH 491A-E Special Topics Seminars .....	1-3
HPES 417 Exercise Prescription .....	4
INCO 408 Health Communications .....	4

#### Community Health Services Option with an Emphasis in Health Services Administration

(Major code #8119)

The Health Services Administration emphasis prepares a student for entry level management positions in all sectors of the health care industry. Additionally, it is an excellent preparation for admission into the graduate professional program in Health Services Administration.

#### Recommended General Education Courses

ECON 103 Principles of Microeconomics .....	4
ECON 104 Principles of Macroeconomics .....	4
ENG 151 English Composition .....	5
HLTH 370J Writing for Health Sciences .....	4
INCO 101 Fundamentals of Human Communication .....	3

MATH 113 Elementary Algebra .....	5
MATH 163A Intro to Calculus .....	4
MICR 211 Environmental Microbiology .....	4
MICR 212 Environmental Microbiology Lab .....	2
POLS 210 Principles of Public Administration .....	4
SOC 101 Intro to Sociology .....	5

### Required Health Science Courses

EH 260 Intro to Environmental Health & Safety .....	4
HLTH 101 Intro to Health and Human Services .....	3
HLTH 202 Health Sciences & Lifestyle Choices .....	4
HLTH 204 Drugs, Alcohol, and Tobacco .....	3
HLTH 227 First Aid .....	3
HLTH 228 CPR .....	1
HLTH 301 Intro to Health Care Organizations .....	4
HLTH 302 Long Term Care Administration I .....	4
HLTH 390 Community Health .....	4
HLTH 402 Contemporary Problems in Health Care Organizations .....	4
HLTH 421 Financial Administration of Health Facilities .....	4
HLTH 422 Financial Reimbursement in Health Care .....	4
HLTH 423 Administration of Acute Care Programs and Facilities .....	4
HLTH 480 Practicum in Health Services Administration I .....	10
HLTH 481 Practicum in Health Services Adm. II .....	15
HS 309 Microcomputer Applications in Hlth. Sc. ....	4

### Required Related Courses

ACCT 201 Financial Accounting .....	4
INCO 103 Public Speaking .....	4

### Plus Selections from the Following Courses: (32 hours)

BA 101 Business and Its Environment .....	4
BUSL 255 Law & Society .....	4
BUSL 360 Law of Health Care .....	4
EDCE 410 Human Relations .....	3
FIN 331 Risk & Insurance .....	4
HLTH 427 Health of Women .....	4
HRM 420 Human Resource Management .....	4
HRM 425 Labor Relations .....	4
INCO 234 Intro to Communication Theory .....	4
INCO 245 Intro to Organizational Communication .....	4
MGT 300 Management .....	4
MGT 450 Managing Health Care Organizations .....	4
MKT 301 Marketing Principles .....	4
MKT 360 Marketing for Nonprofit Organizations .....	4
POLS 387 Financial Management in Government .....	4
POLS 410 Public Policy Analysis .....	4

### Electives

Students will satisfy the remaining hours required for graduation by taking elective courses or attending relevant academic workshops and seminars sponsored or approved by the program. The seminar series in health sciences (HLTH 491) provides the student with special topics not normally contained in the curriculum.

### Community Health Services Option with an Emphasis in Long-Term Health Care Administration

(Major code #6836)

The Long-Term Health Care Administration Emphasis prepares a student for a career in the management of nursing and other long-term care facilities. It fulfills the academic preparation necessary for students to qualify to take the licensure examination of the Ohio Department of Health Board of Examiners for Nursing Home Administration, as well as the National Licensure Examination.

### Required General Health Courses

EH 260 Intro to Environmental Health & Safety .....	4
HEFN 128 Intro to Nutrition .....	4
HLTH 101 Intro to Health & Human Services .....	3
HLTH 202 Health Sciences & Lifestyle Choices .....	4
HLTH 204 Drugs, Alcohol, and Tobacco .....	3
HLTH 227 First Aid .....	3

HLTH 228 CPR .....	1
HLTH 390 Community Health .....	4
MICR 418 Epidemiology (HLTH 350 or HLTH 490 Independent Study in Epidemiology will substitute for MICR 418 .....	4-5
SOC 351 Elementary Research Techniques .....	4
ZOOL 101 Principles of Biology .....	5
ZOOL 301 Human Anatomy .....	6
ZOOL 345 Human Physiology .....	4

### Required Courses for the Long-Term Health Care Administration Option

EDCE 410 Human Relations .....	3
HECF 380 Death and Dying .....	4
HLTH 301 Intro to Health Care Organizations .....	4
HLTH 302 Long Term Care Adm. I .....	4
HLTH 303 Long Term Care Adm. II .....	4
HLTH 402 Contemporary Problems in Health Care Organizations .....	4
HLTH 403 Managing Long Term Care III .....	4
HLTH 413 Health Aspects of Aging .....	3
HLTH 421 Financial Admin. of Health Facilities .....	4
HLTH 422 Financial Reimbursement in Health Care .....	4
HLTH 423 Admin. of Acute Care Programs and Facilities .....	4
HLTH 480 Practicum in Health Services Administration I .....	10
HLTH 481 Practicum in Health Services Administration II .....	15
HS 309 Microcomputer App. in Hlth. Sci. ....	4
MGT 200 or MGT 300 Intro to Management .....	4
MKT 301 Intro to Marketing .....	4
PSY 374 Psychology of Adulthood and Aging .....	4
SW 381 Counseling Older Adults .....	4
SW 395 Aging in the Welfare State .....	4

### Electives

Students will satisfy the remaining hours required for graduation by taking elective courses or attending relevant seminars or workshops sponsored or approved by the program. The seminar series (HLTH 491) provides students with special topics not normally contained in the curriculum.

### Gerontology Certificate

Upon completion of this option in Long-Term Health Care Administration, the student will also qualify for an Ohio University Gerontology Certificate (see Gerontology).

### Environmental Health Science

(Major code #6260)

The Environmental Health Science Program prepares the student for a career in one of the many fields of public health. It also fulfills the educational requirements for registration as a sanitarian and for admission to a graduate school of public health. The Bachelor of Science in environmental health will be awarded to students completing the prescribed course of study.

### Required Core Courses

BUSL 370 Environmental Law .....	4
CHEM 330 Intro to Toxicology .....	4
MICR 211, 212 Environmental Microbiology & Lab. ....	6
MICR 418 Epidemiology .....	4
PSY 121 Elementary Statistics .....	5

### Required Foundation Courses

CHEM 151, 152, 153 Fundamentals of Chemistry .....	15
CHEM 301, 302 Organic Chemistry .....	6
CS 120 Computer Science Survey .....	5
OR	
HS 309 Microcomputer Applications in the Health Sciences ...	4
ECON 103 Principles of Microeconomics .....	4
GEOL 231 Water & Pollution .....	4
INCO 103 Fundamentals of Public Speaking .....	4
MATH 115 Pre-Calculus .....	5

PHIL 130 Intro to Ethics .....	4
PHYS 201 Intro to Physics .....	4
PSY 101 General Psychology .....	5
SOC 101 Intro to Sociology .....	5
ZOOL 170, 171 Intro to Zoology .....	10

### Required Professional Courses

EH 260 Intro to Environmental Health and Safety .....	4
EH 310 Water Supply and Waste Water Env. Health Practice ...	4
EH 312 Solid and Hazardous Waste Management .....	4
EH 330 Food Quality Control .....	4
EH 430 Vector Control and Pesticide Use .....	4
EH 440 Air Quality and Pollution Control .....	4
EH 450 Institutional Environmental Health Practice .....	4
EH 455 Recreational Environmental Health Practice .....	4
EH 457 Environ. Health Planning and Program Adm. ....	4
EH 464 Environmental Health Practicum .....	15
IH 200 Intro to Industrial Hygiene, Occupational Safety, and Health .....	4
IH 400 Industrial Hygiene Sampling and Analysis .....	4
IH 415 Intro to Radiological Health .....	5

### Recommended Electives

ANTH 201 Intro to Biological Anthropology .....	5
GEOG 201 Environmental Geography .....	4
GEOL 201 Environmental Geology .....	4
EH 320 Shelter Environments .....	4
HLTH 202 Health Sciences and Lifestyle Choices .....	4
HLTH 370J Writing for the Health Sciences .....	4
IH 401 Hazardous Materials in the Workplace .....	4
IH 405 Ventilation for Contaminant Control .....	4
IH 410 Physical Hazards: Mgt. and Control .....	4
IH 420 Hazardous Material: Mgt. and Control .....	4

### Health Education

(Major code #6837)

A major in health education prepares students for teaching in the secondary schools and other community settings. A Bachelor of Science in health will be awarded to those students completing the prescribed course of study.

### Required General Education Courses

The current state of Ohio requirements for teacher certification state that a person applying for a teaching certificate must complete 45 quarter hours of general education courses well distributed in the areas of science and mathematics; social sciences; English and/or foreign language; and comparative arts and/or philosophy.

Students also must complete Ohio University's General Education Requirements (see General Education Requirement in the Graduation Requirements section of this catalog). Students are encouraged to work closely with their faculty advisor to make certain that both University General Education and teacher certification general education requirements are met.

The breakdown of these teacher certification general education course requirements is:

#### Science and Mathematics

CHEM 121 Principles of Chemistry .....	4
GEOG 201 Environmental Geography .....	4
OR	
GEOL 201 Environmental Geology .....	4
Tier I Math Requirement .....	5

#### Comparative Arts and/or Philosophy

Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any course in philosophy; comparative arts; HUM 107, 108, 109, 307, 308 or 309; art history; art (except 360, 461, and 462); music (except music education courses, music therapy courses, and the one- and two-hour participation courses); and theater history courses.

### Social Sciences

PSY 101 General Psychology .....	5
SOC 101 Intro to Sociology .....	5

### English and/or Foreign Language

Each student is required to complete at least two courses in English and/or Foreign Language. Freshmen and Junior English composition courses taken to satisfy the University General Education Tier I Requirement may be used toward completion of these hours. The two courses need not be in the same field.

In addition, students must complete INCO 103 to be admitted to Professional Education within the College of Education.

### Required Professional Education Courses

EDCI 275 Learn. Proc. in Classroom .....	5
OR	
PSY 275 Educ. Psych. ....	4
EDCI 401 Urban Field Exp. ....	2
EDCI 480 School and Society .....	3
EDPL 463, 464, 465 Student Tchng. ....	16
EDSE 250, 250L Analys. of Teaching .....	6
EDSE 270, 270L Studies of the Learner .....	4
EDSE 351 Inst. Proc. and Curriculum .....	5
EDSE 420 Tchng. of Reading .....	4
EDSE 420L Reading Lab. ....	1
EDM 480A Intro to Educ. Media .....	2
OR	
EDM 480 Intro to Educ. Media .....	4

### Methods Course

HLTH 379 Teaching of Health .....	5
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### Foundations of Health

HECF 360 Human Sexuality .....	3
OR	
ZOOL 103 Human Biology .....	5
HEFN 128 Intro to Nutrition .....	4
HLTH 101 Intro Health and Human Services .....	3
HLTH 202 Health Sciences & Lifestyle Choices .....	4
HLTH 204 Drugs, Alcohol, & Tobacco .....	3
HLTH 227 First Aid .....	3
HLTH 228 CPR .....	1
HLTH 390 Community Health .....	4
HPES 390 Safety Education .....	4
HPES 409 Tests & Measurements .....	4
HLTH 495 School Health Problems .....	5
MICR 211, 212 Environ. Micro. ....	6
ZOOL 301 Human Anatomy .....	6
ZOOL 345 Human Physiology .....	4

### Industrial Hygiene

(Major code #3309)

The Industrial Hygiene Program prepares individuals devoted to the recognition, evaluation, and control of those environmental factors or hazards arising in or from the workplace which may cause sickness, impaired health and well-being, or significant discomfort among workers. Industrial hygienists are health professionals concerned with how noise, dust, vapors, and other hazards common to the workplace affect workers' health.

Graduates of the program may be employed directly by private laboratories, industrial firms, insurance companies, or governmental agencies, or they may enter graduate programs in industrial hygiene, public health, or other health-related disciplines. Students completing the prescribed course of study will be awarded the Bachelor of Science in health degree.

### Fundamentals of Industrial Hygiene

IH 200 Intro to IH and Occup Health & Safety .....	4
IH 400 IH Sampling & Analysis .....	5
IH 401 Hazardous Materials in the Workplace .....	4
IH 405 Ventilation for Contaminant Control .....	4
IH 410 Physical Hazards: Evaluation & Control .....	4
IH 415 Intro to Radiological Health: Eval & Control .....	5
IH 420 Hazardous Material: Management & Control .....	4

**Professional Requirements****Chemistry**

CHEM 151, 152, 153 Fundamentals of Chemistry .....	15
CHEM 241 Quantitative Analysis .....	4
CHEM 242 Quantitative Analysis Lab .....	7
CHEM 301, 302 Organic Chemistry .....	6
CHEM 325 Instrumental Methods of Analysis .....	4
CHEM 330 Intro to Toxicology .....	4
CHEM 483 Chemical Separation Methods .....	4

OR

CHEM 489 Basic Biochemistry .....	4
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**Engineering and Technology**

CE 452 Water & Wastewater Analysis .....	3
ISE 422 Seminar on Occupation Health & Safety .....	3
IT 483 Industrial Safety .....	3

**Health Science**

EH 260 Intro to Environmental Health & Safety .....	4
HLTH 202 Health Sciences & Lifestyle Choices .....	4
HLTH 301 Intro to Health Care Organizations .....	4
HLTH 390 Community Health .....	4

**Microbiology/Zoology**

MICR 211, 212 Environmental Microbiology .....	6
MICR 418 Epidemiology .....	4
ZOOL 170 Intro to Zoology .....	5
ZOOL 301 Human Anatomy .....	6
ZOOL 345 Human Physiology .....	4

**Required Related Courses**

BUSL 370 Environmental Law .....	4
ECON 103 Principles of Microeconomics .....	4
ECON 313 Economics of the Environment .....	4
INCO 101 Fundamentals of Human Communication .....	4
INCO 103 Fundamentals of Public Speaking .....	4
MGT 200 Intro to Management .....	4
POLS 210 Principles of Public Administration .....	4
PHYS 201 Intro to Physics .....	4
PSY 101 General Psychology .....	5
PSY 121 Elementary Statistics .....	5
SOC 101 Sociology .....	5

**PHYSICAL EDUCATION**

(Major code #8106)

A major in physical education prepares men and women to teach physical education at the elementary and secondary school levels. Students may pursue a minor in physical education. A student must be a physical education major for at least one academic year (3 quarters) immediately prior to graduation to be granted a Bachelor of Science in physical education degree.

**Required General Education Courses**

The current state of Ohio requirements for teacher certification state that a person applying for a teaching certificate must complete 45 quarter hours of general education courses well distributed in the areas of science and mathematics; social sciences; English and/or foreign language; and comparative arts and/or philosophy.

Students also must complete Ohio University's General Education Requirements (see General Education Requirement in the Graduation Requirements section of this catalog). Students are encouraged to work closely with their faculty advisor to make certain that both University General Education and teacher certification general education requirements will be met.

The breakdown of these teacher certification general education course requirements is:

**Science and Mathematics**

Each student is required to complete at least one course in science and one course in mathematics. The Tier I "quantitative skills" requirement may be used to fulfill the mathematics requirement. BOT 101 or ZOOL 101, Principles of Biology, is required.

**Comparative Arts and/or Philosophy**

Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any course in philosophy; comparative arts; HUM 107, 108, 109, 307, 308, or 309; art history; art (except 360, 461, and 462); music (except music education courses, music therapy courses, and the one- and two-hour participation courses); and theater history courses.

**Social Sciences**

Each student is required to complete at least two courses in social sciences. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses.

**English and/or Foreign Language**

Each student is required to complete at least two courses in English and/or Foreign Language. Freshmen and junior English composition courses taken to satisfy the University General Education Tier I requirement may be used toward completion of these hours. The two courses need not be in the same field.

In addition, students must complete INCO 103 to be admitted to Professional Education within the College of Education.

**Required Professional Education Courses**

EDCI 275 Learn Proc. in Classroom .....	5
OR	
PSY 275 Educ. Psych. ....	4
EDCI 401 Advanced Urban Field Experi. ....	2
EDCI 480 School & Society .....	3
EDM 480A Intro to Educ. Media .....	2
EDPL 461, 463, 465 Student Tchng. ....	16
EDSE 250 Analys. of Tchng. ....	4
EDSE 270, 270L Studies of the Learner .....	4
EDSE 351 Instr. Proc. and Curr. ....	5
EDSE 420 & 420L Tchng. of Reading .....	5
HPES 234, 334, 434 Field Experi. ....	4
HPES 402 Learning Strategies .....	3

**Physical Education****(Elementary-Secondary with K-12 certification)**

HLTH 227 First Aid .....	3
HLTH 495 School Health Problems .....	5
HPES 105 Cond. for Activ. & Organic Effic. ....	2
HPES 106 Intro to Human Movement .....	2
HPES 115 Rhythmics .....	2
HPES 134 Intro to Field Experi. ....	2
HPES 222 Tumbling & Mod. Gymnastics .....	2
HPES 223 Track & Field .....	2
HPES 225 Gymnastics for Men & Women .....	2
HPES 273 Movement Educ. & Fund. Skills .....	3
HPES 275 Elem. School Rhythm & Dance .....	3
HPES 302 Biomechanics .....	4
HPES 333 Theory of Adapted Activities .....	3
HPES 345 Intro to Exercise Physiology .....	4
HPES 404 History & Prin. of Phys. Ed. ....	4
HPES 405 Motor Learning .....	4
HPES 406 Org. & Admin. of Physical Education .....	4
HPES 409 Tests & Measurements .....	4
ZOOL 301 Human Anatomy .....	6

**1. TEAM SPORTS (Select 4 hours)**

HPES 260A Flag Football .....	1
HPES 260B Team Handball .....	1
HPES 262A Field Hockey .....	1
HPES 262B Soccer .....	1
HPES 263A Basketball .....	1
HPES 263B Volleyball .....	1
HPES 264A Softball .....	1
HPES 264B Lacrosse .....	1

**2. INDIVIDUAL SPORTS (Select 2 hours)**

HPES 141A Archery .....	1
HPES 141B Golf .....	1
HPES 221A Tennis .....	1



HPES 221B Badminton .....	1
HPES 224A Racquetball .....	1
HPES 224B Wrestling .....	1
3. AQUATICS (Select 2 hours)	
HPES 104 Intermed. Swimming .....	2
HPES 218 Life Guard Training .....	2
HPES 220 Water Safety Instructors .....	3
4. DANCE (Select 2 hours)	
HPES 107 Modern Dance I .....	2
HPES 116 Social Forms of Dance .....	2
HPES 117 Folk & Square Dance .....	2
5. OUTDOOR EDUCATION (Select one course)	
HREC 291 Outdoor Pursuits .....	3
HREC 311 Expedition Management .....	3
HREC 314 Camping .....	4
HREC 315 Outdoor Education and Recreation .....	4
<b>Theory and Practice Courses</b>	
HPES 377 Theory & Pract. of Elem. Phys. Ed. ....	3
HPES 372 Theory & Pract. of Team and Individual Sports .....	3
<b>NOTE:</b> No more than 3 hours of credit in each of the following courses will count toward the 192 hours needed for graduation:	
HSC 107 Conditioning & Weight Training	
HPES 418A Instructional Experience	
MUS 244A Marching Band	

## RECREATION STUDIES

Major and minor curricula are offered for prospective recreation specialists. Upon successful completion of the requirements students who major in recreation may apply for the Bachelor of Science degree. A degree in recreation will not lead to a teaching certificate in the state of Ohio.

The coursework is designed to prepare students in the basic recreation core and allow them to concentrate in therapeutic recreation, recreation management, outdoor education and camping, wilderness skills, or special interests.

The major curriculum prepares both men and women to assume positions in city recreation and park departments, state and federal government agencies, youth service agencies, institutional recreation, industrial agencies, religious organizations, camping, commercial recreation, and administration.

The minor in recreation studies is designed to fit the needs of part-time employees in the field of recreation. The curricula will prepare the students for supervision in schools and community recreation programs, summer playgrounds, and camping activities.

## Program Requirements

### Health and Sport Sciences

(Select 20 hrs.)

HLTH 202 Health Sciences & Lifestyle Choices .....	4
HLTH 204 Drugs, Alcohol, & Tobacco .....	3
HLTH 227* First Aid .....	3
HLTH 327 Instructor's First Aid .....	3
HPES 115 Rhythmic .....	2
HPES 218 Life Guard Training .....	2
HPES 220 Water Safety for Instructors .....	3
HPES 339 Football Officiating .....	3
HPES 340 Basketball Officiating .....	3
HPES 341 Baseball Officiating .....	3
HPES 390* Safety Educ. ....	4
HREC 290* Recreational Sport Officiating .....	3
HREC 381* Admin. of Intramurals .....	4

### Major Content Area

1. Professional Recreation Core (select 50 hrs.)

HREC 199 Intro to Therapeutic Recreation Services .....	3
HREC 200* Intro to Leisure .....	2
HREC 236 Field Exper. in Rec. ....	1-3
HREC 250 Rec. Leadership .....	3

HREC 251 Crafts for Rec. Programs .....	3
HREC 310* Program Planning & Facilities for Rec. ....	5
HREC 314 Camping .....	4
HREC 315 Outdoor Educ. & Rec. ....	4
HREC 336* Field Exper. in Rec. ....	3
HREC 345 Camp Leadership .....	2
HREC 403 Hist. of Rec. ....	3
HREC 440* Internship .....	16
HREC 449* Admin. of Rec. ....	4

2. Professional Education Courses (required)

EDM 480 Intro to Educational Media .....	4
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3. Recreation Tool Courses (select 18 hrs.)

ART 101 Two Dimensional Design .....	4
ART 102 Three-Dimensional Design .....	4
ART 105 Intro to Painting .....	4
ART 115 Intro to Ceramics .....	4
ART 128 Intro to Drawing .....	4
ART 131 Intro to Sculpture .....	4
ART 141 Intro to Printmaking .....	4
ART 151 Intro to Graphic Design .....	4
ART 191 Intro to Photography .....	4
ART 360 Art for Elementary Teachers .....	6
HPES 270 Tchng. of Physical Educ. ....	3
HPES 274 Sport & Game Skills for Elem. School Children .....	3
HREC 240** Taxidermy .....	2
HREC 241** Taxidermy II .....	2
MUS 120 Intro to Music Lit. ....	3
MUS 160 Music Fundamentals .....	3
MUS 161 Music for the Classroom Teacher .....	3

\*Denotes required course

\*\*Outdoor education students must select either HREC 240 or 241.

4. Physical Education Activities

(Select 9 courses, 1 hour each)

## Primary Areas of Concentration

### A. Outdoor Education, Interpretive Services, and Camping

(Major code #8108)

This option focuses upon planning and administering outdoor recreation programs, with special emphasis available for school-oriented programs and resident camping. Students may qualify for positions as interpretive naturalists, outdoor education resource persons, camp directors, visitor information center directors, or supervisors of outdoor recreation programs in federal, state, and local agencies.

Select a minimum of 35 hours from:

ASTR 100 Survey of Astronomy .....	4
BOT 102 Plant Biology .....	5
BOT 220 Fall Plants .....	4
BOT 225 Spring Flowers .....	4
BOT 247 Vegetation of North America .....	4
BOT 311 Biology and Human Affairs .....	4
BOT 425 Plant Ecology .....	5
OR	
ZOOL 475 Sociobiology .....	3
BOT 426 Physiological Plant Ecology .....	5
EDCI 275 Learning Processes in Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDEL 340 Teaching Of Science in Elem. Classroom .....	4
GEOG 101 Elements of Physical Geography .....	5
GEOL 101 Intro to Geology .....	5
GEOG 201 Environmental Geography .....	4
OR	
GEOL 201 Environmental Geology .....	4
GEOL 231 Water and Pollution .....	4
GEOL 291A Earth Materials .....	2
GEOL 291B Glaciers & Glaciation .....	2
GEOL 291C Volcanoes & Earthquakes .....	2
GEOL 291D Mineral Resources .....	2
GEOL 291E Fossils & Evolution .....	2
GEOL 291F Soils & Weathering .....	2
GEOL 310 Rocks & Minerals .....	6
HREC 101 Orienteering .....	1

HREC 102 Advanced Orienteering .....	1
HREC 103 Survival I .....	1
HREC 104 Survival II .....	1
ZOOL 170 Intro to Zoology .....	5
ZOOL 435 Entomology .....	6

## B. Recreational Management

(Major code #8109)

This option focuses upon the administration of recreation programs and will qualify students for positions with public recreation, voluntary agencies, resident institutions, and camp administration.

Select a minimum of 35 hours from:

ACCT 201 Financial Accounting .....	4
BUSL 255 Law & Society .....	4
BUSL 465 Law of Sports .....	4
CS 120 Computer Science Survey .....	5
OR	
HS 309* Microcomputer Applications in Hlth. Sc. ....	4
CS 220 Intro to Computing .....	5
ECON 103 Principles of Microeconomics .....	4
HREC 311 Expedition Management .....	3
HRM 420 Human Resource Management .....	4
HRM 425 Labor Relations .....	4
HRM 460 Human Resource Policy, Planning & Info Systems ..	4
JOUR 105 Intro to Mass Commun .....	4
JOUR 221 Graphics of Communication .....	5
JOUR 231 News Reporting (preregister in dept.) .....	4
JOUR 250 Principles of Advertising .....	4
JOUR 471 Public Relations Principles .....	5
MGT 200 Intro to Management .....	4
MGT 325J Business Communications .....	4
MGT 340 Organizational Behavior-Micro Perspective .....	4
MGT 428 Nonindustrial Labor Relations .....	4
MGT 450 Managing Health Care Organizations .....	4
MKT 301 Marketing Principles .....	4

\*Denotes required course

Those interested in camp administration should select one of the following courses:

HEFN 120 Meal Management .....	3
HEFN 128 Intro to Nutrition .....	4
HEFN 222 Food Science & Principles .....	4

## C. Special Interests

(Major code #8110)

This option focuses upon individualized programs designed to meet unique career goals and will qualify students for extremely specialized positions in recreation and recreation-related fields.

The special interests concentration consists of the student selecting, in consultation with an assigned advisor from the recreation studies faculty, a 35-hour course of study directed toward his or her particular goals.

The student's course of study in the special interests concentration must be approved by the recreation studies program faculty and the coordinator for recreation studies. A copy of the student's program will be filed in the office of the coordinator for recreation studies.

This option (concentration) will not be available to any student who can meet his or her career goals through one of the existing courses of study or to any student who is not a declared recreation major.

## D. Therapeutic Recreation

(Major code #8104)

This option focuses upon planning, conducting, and administering recreation programs serving the ill, disabled, aging, and disadvantaged in institutional and community settings. Students may qualify for positions serving people

with disabilities in the area of emotional illness, mental retardation, physically handicapped, and aging. Career opportunities are also increasing rapidly in penal and correctional settings and community programs serving the culturally/socially disadvantaged.

Select a minimum of 35 hours from:

EDEL 200 Studies of Children .....	4
OR	
HECF 160 Intro to Child Development .....	4
EDSP 270 Classroom Mgt of Children w/ Behavioral Prob 1 ...	3
EDSP 271 Intro to Educ of the Except Child .....	3
EDSP 378 Sheltered Workshop Organization .....	2
EDSP 400 Nature & Needs of Severe Behavior Handicapped ...	3
EDSP 477 Communicating w/Parents & Profess in Spec Ed ...	4
HLTH 413 Health Aspects of Aging .....	3
HPES 302 Biomechanics .....	4
HPES 333 Theory of Adaptive Activities .....	3
HPES 485 Perceptual Motor Develop in Children .....	3
HREC 214 Camping for Special Populations .....	2
HREC 376* Prin & Prac of Therapeutic Recreation .....	3
HREC 377 Administration of Activities for Therapeutic Recreation .....	3
HREC 430 Principles of Therapeutic Recreation for Mentally Retarded .....	3
HREC 460 Understanding Play .....	3
HREC 470 Program Planning for Handicapped & Confined ...	3
HSS 378 Sign Language .....	3
MUS 181 Intro to Music Therapy .....	3
PSY 231 Psychology of Adjustment .....	4
PSY 332 Abnormal Psychology .....	4
PSY 376 Psychological Disorders of Childhood .....	4
SOC 334 Sociology of Aging .....	4
SOC 361 Deviant Behavior .....	4
SOC 363 Juvenile Delinquency .....	4
ZOOL 301 Human Anatomy .....	6

\*Denotes required course

## E. Wilderness Skills

(Major code #8113)

This option focuses upon planning, conducting, and administering high adventure and wilderness skills programs. Students may qualify for positions with various wilderness and survival schools, outdoor leadership programs, expedition outfitters, and commercial enterprises in high adventure activities. Career opportunities are also increasing rapidly in programs involving juvenile offenders in both public and private agencies.

Select a minimum of 35 hours from:

BOT 220 Fall Plants .....	4
GEOL 201 Environmental Geology .....	4
GEOL 231 Water & Pollution .....	4
GEOL 330 Prin. of Geomorphology .....	5
GEOL 407 Geological Applications of Remote Sensing .....	4
HREC 101* Orienteering .....	1
HREC 102* Advanced Orienteering .....	1
HREC 105 Whitewater Rafting .....	1
HREC 106 Hunting .....	1
HREC 107 Trap Shooting .....	1
HREC 108 Technical Climbing .....	1
HREC 111 Cross-country Skiing .....	1
HREC 112 Backpacking .....	1
HREC 113 Canoeing .....	1
HREC 114 Kayaking .....	1
HREC 115 Ropes .....	1
HREC 116 Rescue Techniques .....	1
HREC 117 Primitive Construction .....	1
HREC 291 Outdoor Pursuits .....	3
HREC 311* Expedition Mgt. ....	3
HREC 390* Wilderness Survival .....	3
HREC 475* Adventure Programming .....	3
SOC 201 Contemp. Social Prob. ....	4
SOC 210 Intro to Social Psych. ....	4
SOC 361 Deviant Behavior .....	4

SOC 363 Juvenile Delinquency .....	4
SOC 366 Penology .....	4
SW 101 Intro to Social Welfare & Social Work .....	3

\*Denotes required course

## SPORT SCIENCES

The sport sciences include six areas of specialization: aquatic management, coaching, exercise physiology, sport industry, sport for special populations, and youth sports. These programs are designed for students who do not plan to meet teacher certification requirements.

A student must be a sport sciences major for at least one academic year (3 quarters) immediately prior to graduation to be granted a Bachelor of Science in sport sciences degree. No more than 3 quarter hours of credit in each of the following courses will count toward the 192 hours needed for graduation:

HSC 107 Conditioning & Weight Training	
HPES 418A Instructional Experience	
MUS 244A Marching Band	

## Program Requirements

### Core Courses:

ANTH 101 Intro to Cultural Anthropology .....	5
HLTH 204 Drugs, Alcohol, & Tobacco .....	3
HLTH 227 First Aid .....	3
HPES 105 Conditioning for Activity & Organic Efficiency .....	2
HPES 106 Intro to Human Movement .....	2
HPES 261 Sport Sciences Practicum .....	1
HPES 273 Movement Education and Fundamental Skills .....	3
OR	
HPES 274 Sport & Game Skills for Elem School Children .....	3
OR	
HPES 275 Elem. School Rhythm & Dance .....	3
HPES 390 Safety Education .....	4
HPES 404 History & Principles of Physical Education .....	4
HPES 406 Organization & Administration of PE .....	4
HPES Skills Classes .....	10-14
INCO 103 Fundamentals of Public Speaking .....	4
PSY 101 General Psychology .....	5
PSY 121 Elem Statistics for Behavioral Sciences .....	5
PSY 233 Psychology of Personality .....	4
ZOOL 103 Human Biology .....	5

## Areas of Specialization

Students must meet with an advisor before enrolling in classes.

### Aquatic Management

(Major code #8120)

BUSL 255 Law and Society .....	4
HLTH 228 CPR .....	1
HLTH 380 Safety Education .....	4
HPES 220 Water Safety Instructor .....	3
HPES 305 Coaching of Swimming and Diving .....	2
HPES 373 Adapted Aquatics .....	3
HPES 380 Life Guard Training Instructor .....	2
HPES 455 Administration of Aquatic Facilities .....	3
INCO 101 Fundamentals of Human Communication .....	4
MGT 200 Intro to Management .....	4

Select minimum of 4 credits from the following:

HPES 109 Synchronized Swimming .....	2
HPES 265 Diving and Competitive Swim .....	2
HREC 113 Canoeing .....	1
HSC 156 Scuba .....	1
HSC 155 Water Polo .....	1
HSC 128 Water Skiing .....	1
HSC 151 Swim Workouts .....	1

### Coaching

(Major code #8121)

Required	
HEFN 128 Introduction to Nutrition .....	4
HLTH 228 CPR .....	1

HPES 212 Intro to Coaching .....	3
(prereq. to other courses)	
HPES 215 Pract. in Athletics .....	2
HPES 319 Research in Phys. & Motor Dev. in Athletes .....	3
HPES 325 Human Dynamics in Coaching .....	3
HPES 412 Admin. of Sports .....	3
HSAT 129 Intro to Athletic Training .....	3
PHIL 231 Philosophy of Sport .....	4
SOC 233 Sociology of Sport .....	4

2 coaching classes (chosen from below) .....

HPES 305 Swimming .....	2
HPES 318 Tennis .....	3
HPES 320 Wrestling .....	3
HPES 324 Soccer .....	3
HPES 351 Golf .....	2
HPES 352 Ice Hockey .....	3
HPES 353 Lacrosse .....	3
HPES 354 Volleyball .....	3
HPES 356 Field Hockey .....	3
HPES 365 Basketball .....	3
HPES 366 Baseball/Softball .....	3
HPES 367 Football .....	3
HPES 368 Track .....	3

### Exercise Physiology

(Major code #8122)

CHEM 121, 122, 123 Principles of Chemistry .....	12
OR	
CHEM 151, 152, 153 Fundamentals of Chemistry .....	15
HEFN 128 Introduction to Nutrition .....	4
HPES 302 Biomechanics .....	4
HPES 414 Physiology of Exercise .....	4
HPES 415 Physiology of Exercise Lab .....	2
HPES 417 Exercise Prescription .....	4
MATH 113 Algebra .....	5
OR	
MATH 163A Intro to Calculus .....	4
PHYS 201, 202 Intro to Physics .....	8
ZOOL 101 Principles of Biology .....	5
OR	
ZOOL 170, 171, 172, 173 Intro to Zoology .....	14
ZOOL 301 Human Anatomy .....	6
ZOOL 345 Human Physiology .....	4
ZOOL 346 Human Physiology Lab .....	3

### Sport Industry

(Major code #8123)

ACCT 201 Financial Acct. ....	4
CS 120 Comp. Sci. Survey .....	5
ECON 103 Principles of Microeconomics .....	4
HPES 325 Human Dynamics of Coaching .....	3
HPES 412 Admin. of Sports .....	3
HSAT 129 Intro to Athletic Training .....	3
MGT 200 Intro to Management .....	4
PSY 310 Motivation .....	4

(4 courses from the following group)

AAS 440 The Black Child .....	4
BUSL 255 Law and Society .....	4
BUSL 465 Law of Sports .....	4
INCO 205 Group Discussion .....	4
INCO 206 Comm. in Interpersonal Relations .....	4
INCO 404 Principles and Techniques of Interviewing .....	4
MKT 461 Social Issues of Marketing .....	4
SOC 211 Crowd & Mass Behavior .....	4
SOC 233 Sociology of Sport .....	4
SOC 363 Juvenile Delinquency .....	4
SOC 370 Sex Roles & Inequality .....	4

### Sport for Special Populations

(Major code #8124)

HPES 212 Intro to Coaching .....	3
HPES 314 Coaching Sports for the Disabled .....	2
HPES 325 Human Dynamics of Coaching .....	3
HPES 333 Theory of Adapted Activities .....	3
HPES 405 Motor Learning .....	4
HPES 412 Administration of Sports .....	3
HPES 434 Field Experience .....	2
INCO 101 Fundamentals of Human Communication .....	4
INCO 206 Communication in Interpersonal Relationships .....	4

PSY 231 Psychology of Adjustment .....	4
PSY 275 Educational Psychology .....	4
PSY 310 Motivation .....	4
SOC 210 Intro to Social Psychology .....	4
SOC 233 Sociology of Sport .....	4

### Youth Sports

(Major code #8125)

AAS 440 The Black Child .....	4
HECF 160 Intro to Child Development .....	4
OR	
PSY 273 Child and Adolescent Psychology .....	4
HEFN 128 Intro to Nutrition .....	4
HPES 213 Youth Sports .....	3
HPES 273 Movement Education and Fundamental Skills .....	3
HPES 274 Sport and Game Skills for Elementary PE .....	3
HPES 485 Perceptual Motor Development in Children .....	3
HLTH 228 CPR .....	1
HREC 460 Understanding Play .....	3
PSY 376 Psychological Disorders of Childhood .....	4
SOC 233 Sociology of Sport .....	4

### Electives

EDM 480 Intro to Educational Media .....	4
HPES 215 Practicum in Athletics .....	2

## SCHOOL OF HEARING AND SPEECH SCIENCES

Edwin Leach, *Director*

The school grants B.S., M.A., and Ph.D. degrees in hearing and speech sciences. The bachelor's degree is considered to be pre-professional. Students entering the program must be eligible to go on to graduate school to obtain clinical certification or complete coursework and student teaching for certification as a speech therapist in the schools. Students who plan on seeking education certification at some time in the future should take courses indicated throughout the program.

During the senior year students who have maintained a 3.0 overall grade-point average, with no HSS course grade less than C, will be offered admission to the HSS pre-graduate program. These students will be eligible to take special coursework and practicum during the senior year.

Practicum training occurs in the campus Speech and Hearing Clinic, regional speech clinics, public schools, mental retardation centers, and other clinical or educational settings. Consultation concerning all types of communicative disorders may be arranged with the coordinator of clinical services. Remedial training and diagnostic evaluations are provided to University students. The audiological division evaluates all types of hearing problems in people from infancy to old age, including hearing aid evaluations. Nominal fees are charged for speech and hearing services. Research in therapy, acoustics, and other areas of communication is conducted in well-equipped laboratories that house four sound-proof rooms.

The master's programs in speech pathology and audiology are accredited by the American Board of Examiners in Speech Pathology and Audiology's Education and Training Board. Information about major programs and requirements can be obtained from the school office in Lindley Hall.

### MAJOR IN HEARING AND SPEECH SCIENCES

(Major code #5305)

#### Freshman

Majors are assigned advisors and are expected to see their advisors during each preregistration period. All stu-

dents wishing to major in HSS should see the undergraduate coordinator to establish a file and have an advisor assigned. HSS majors who may wish to obtain education certification at some time in the future should apply during the third quarter of the freshman year to the College of Education for admission to teacher education (See College of Education section of this catalog).

#### Courses required of all majors:

HSS 107 Voice & Articulation .....	2
HSS 108 Intro to Speech Disorders .....	5
PSY 101 General Psychology .....	5
PSY 121 Elem Statistics for Behavioral Sciences .....	5

#### Sophomore

During the sophomore year students must pass a speech proficiency test administered in HSS 240 and pass the departmental phonetics proficiency test during either the winter or spring quarter.

#### Courses required of all majors:

HSS 209 Phonetics (fall, spring) .....	4
HSS 213 Anatomy and Neurology (fall, winter) .....	4
HSS 240 Professional Orientation (fall, spring) .....	2
HSS 250 Speech and Hearing Science (winter, spring) .....	4
HSS 279 Basic Manual Communication (fall, winter) .....	3
PSY 275 Educational Psychology .....	4
HSS area electives*	

Students who may wish to seek education certification at some time in the future should take these additional courses during the sophomore year.

EDEL 200 Studies of Children & Lab .....	5
EDSP 270 Classroom Mgt of Children w/Behavior Prob. ....	3
PSY 376 Psychological Disorders of Childhood .....	4
OR	
EDSP 271 Intro to Education of Exceptional Child .....	3

Students seeking education certification should also apply in the third quarter of the sophomore year to the College of Education for advanced standing in professional education (see College of Education section of this catalog).

#### Junior

Majors cannot enter junior practicum class without having successfully passed departmental speech and phonetics proficiency tests.

#### Courses required of all majors:

HSS 310 Language Development (fall) .....	5
HSS 318 Articulation Disorders (fall) .....	4
HSS 320 Disorders of Fluency & Phonation .....	3
HSS 341 Speech/Language Practicum (winter, spring) .....	2
HSS 370 Basic Audiology (winter) .....	4
HSS 372 Intro to Audiology Profession (spring) .....	1
PSY 376 Psychological Disorders of Childhood .....	4
Advanced English composition .....	4
HSS area electives*	

Students seeking education certification should take these courses also. They may be taken during the junior or senior year.

EDCE 410 Human Relations .....	3
EDCI 401 Urban Field Experience .....	2
EDEL 311, 311L Teaching of Reading in Elem School & Lab ...	5
EDSP 474 Intro to Specific Learning Disabilities .....	4
LING 275 Intro to Language & Culture .....	5
OR	
LING 350 Intro to General Linguistics .....	5

OR	
PSY 307 Psycholinguistics	4
PSY 310 Motivation	4
OR	
PSY 332 Abnormal Psychology	4
OR	
PSY 233 Psychology of Personality	4

## Senior

Students may not enter senior practicum HSS 442 if they have not obtained a grade of C or better in both HSS 318 and HSS 341.

Seniors who are admitted to the pregraduate program will be eligible to take special coursework and practicum.

Courses required of all majors:

HSS 422 Diagnostics (fall)	3
HSS 442 Senior Speech/Language Practicum (fall)	2
HSS 444 Disorders of Language (winter)	3
HSS 471 Auditory Rehabilitation (winter)	5
Tier III course	3-5
HSS area electives*	

Courses available to pregraduate students only:

HSS 421 Advanced Disorders of Voice	4
HSS 442A Audiology Practicum (winter, spring)	2
HSS 442C Advanced Speech/Language Practicum (winter, spring)	4
HSS 463 Pediatric/Educational Audiology (spring)	4

\*HSS area electives requirement as described below.

## Area Elective Requirements

During the first four years, in addition to the required courses listed in previous sections, students must elect at least one course from each of the five areas listed below. A course which is taken for education certification may, if it applies in a given area, count for both the certification and HSS area elective requirement. A list of specific courses that will count under each area can be obtained from the HSS undergraduate coordinator.

The HSS elective areas are:

- Area I — Linguistics
- Area II — Psychology
- Area III — Computer Science or Application
- Area IV — Gerontology
- Area V — Child Development

## SCHOOL OF HOME ECONOMICS

Judith Matthews, *Director*

The School of Home Economics, accredited by the American Home Economics Association, offers programs which provide specialized preparation for professionals in family studies and community services, food and nutrition, interior design, and textiles and clothing. There are 12 professional curricula leading to the B.S. in home economics degree. In addition, University College and the school offer a two-year curriculum in child development leading to the A.A. degree. Graduate work leading to the M.S. degree also is offered (see *Graduate Catalog*).

**Elective Courses and Special Programs.** The School of Home Economics offers some courses that have no prerequisites and are open to any student in the University. Special seminars and workshops for in-service education also are offered.

**Special Facilities.** The program in home economics provides for a variety of activities and experiences. A child development center and an independent living skills center

are maintained on campus. The School of Home Economics is approved by the State of Ohio Department of Education to prepare vocational home economics teachers. Opportunities for field work are available in educational settings, business organizations, community agencies, and hospitals.

**Child Development Center.** The Ohio University Child Development Center provides clinical opportunities for Ohio University students from the schools of Home Economics, Hearing and Speech Sciences, and Health and Sport Sciences; the Department of Psychology; and the College of Education, as well as from other related disciplines throughout the University.

The philosophy of the Child Development Center is based on the belief that learning results from the dynamic interaction between children's emerging cognitive and affective systems and their environment. The primary commitment of the Child Development Center is to help children realize their fullest potential in their emotional, social, cognitive, and physical development.

A second responsibility of the Child Development Center is to play an active, coordinated role in preparing preschool and early childhood educators. In addition to serving as a training and observation site for Ohio University students, the center is committed to research that furthers knowledge of the growth and development of children, of family relations, and of educational curricula.

Finally, the center acts as an extension of and support to families in the Athens community, offering both developmental child care and professional knowledge of children's growth, development, and learning.

**Independent Living Skills Center.** The Independent Living Skills Center (ILSC) at Ohio University provides services to individuals who have functional limitations that impair their ability to perform tasks necessary for independent living.

The goals of the Independent Living Skills Center are:

1. Professional education for people providing services to individuals with functional limitations to improve or to maintain independent living skills.
2. Research and demonstration programs in independent living to develop better methods of serving individuals with functional limitations.
3. Services to individuals who have functional limitations that have resulted in a temporary or permanent inability to perform tasks that will enable them to function as independently as possible.
4. Community outreach service involving information and educational programming about independent living to persons working directly with disabled people or to individuals who may be potential advocates for disabled people.

## DEGREE REQUIREMENTS FOR ALL HOME ECONOMICS MAJORS

Candidates for the degree of B.S. in home economics must fulfill the University General Education Requirements and must complete a minimum of 192 hours (see General Education Requirement in the Graduation Requirements section of this catalog). Only three hours of physical education and eight hours of developmental coursework will be counted toward the 192-hour requirement. A point-hour ratio of 2.0 (C) is required on all hours attempted, but includes only final hours and grade points on repeated courses. Some programs have additional criteria that must be met. In addition, students may be required to have a higher g.p.a. than 2.0 (C) to obtain certain field experiences/internships or to be admitted to graduate school.

## REQUIREMENTS FOR PROFESSIONAL CURRICULA

### Family Studies and Community Services

#### Program Standards

To remain active in any program option listed for Family Studies and Community Services, a student must meet the following criteria:

1. Maintain an overall g.p.a. of 2.0 (C) or better in all hours attempted at Ohio University.
2. Maintain a g.p.a. of 2.0 (C) or better in all courses listed under Home Economics Basic and Specialized Requirements in the student's selected program option.
3. No grade below a 2.0 (C) is acceptable toward completion of the courses identified by an asterisk (\*) in the student's program option.

**NOTE:** Students who are pursuing teacher certification must meet the criteria for admission to teacher education established by the College of Education (see Admission to Professional Education in the College of Education section for further information).

#### Early Childhood Education

(Major code #6350)

This program prepares students for teaching in nursery schools, child-care centers, Head Start programs, prekindergarten programs in public schools, and preschool programs for disabled children. The program meets the requirements for prekindergarten teacher certification in Ohio.

#### Required General Education Courses

The current state of Ohio requirements for teacher certification state that a person applying for a teaching certificate must complete 45 quarter hours of general education courses well distributed in the areas of science and mathematics; social sciences; English and/or foreign language; and comparative arts and/or philosophy.

Students also must complete Ohio University General Education Requirements (see General Education Requirement in the Graduation Requirements section of this catalog). Students are encouraged to work closely with their faculty advisor to make certain that both University General Education and teacher certification general education requirements will be met.

The breakdown of these teacher education general education course requirements is:

#### Science and Mathematics

Each student is required to complete at least one course in science and one course in mathematics. PSY 121, Elementary Statistics for the Behavioral Sciences, is required; MATH 120, Elementary Topics in Math is recommended. Appropriate science courses are: astronomy, chemistry, physical science, geological sciences, botany, and zoological and biomedical sciences.

#### Comparative Arts and/or Philosophy

Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any course in Philosophy; Comparative Arts; HUM 107, 108, 109, 307, 308, and 309; Art History; Art (except 360, 461, or 462); Music (except for music education, music therapy, and the one- or two-hour participation courses); and Theater History. MUS 160, Music Fundamentals, or MUS 262, Music in Early Childhood, is required.

#### Social Sciences

Each student is required to complete at least two courses in social science. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses.

#### English and/or Foreign Language

Each student is required to complete at least two courses in English and/or Foreign Language. Freshman and junior English composition courses taken to satisfy the University General Education Tier I Requirement may be used toward completion of these hours. The two courses need not be in the same field.

In addition, students must complete INCO 103 to be admitted to Professional Education within the College of Education.

#### Thirty Hour Concentration

A thirty hour concentration in one of the following areas is required: humanities, mathematics, natural sciences, or social sciences. An area of concentration may contain ten quarter hours that are presently used to meet the General Education Requirements in one of these areas. An area of concentration must contain at least ten quarter hours at the 300 level or above. Courses for an area of concentration must be selected from a pre-approved listing of courses that are acceptable as possible concentration courses.

#### Home Economics Basic Requirements

HECE 390 Family Consumer Economics .....	3
OR	
HECE 395 Home Management .....	3
HEID 180 Intro to Residential Design .....	3
HEFN 128 Intro to Nutrition .....	4

#### Specialized Requirements

ART 360 Art for Elementary Education .....	6
HECF 160* Intro to Child Development .....	4
HECF 299* Soph. Practicum-Prof. Assessment .....	5
HECF 361 Preschool Guidance .....	4
HECF 363 Creative Experiences w/Preschool Children .....	4
HECF 364 Premath & Science Exper w/Young Children .....	4
HECF 365 Infant Education .....	4
HECF 371* Family Development .....	3
HECF 399* Jr. Practicum-Prof. Development .....	5
(Select 2 of the HECF 462 courses listed)	
HECF 462A Pluralistic Life Styles .....	2
HECF 462B Parenthood .....	2
HECF 462C Middle Childhood .....	2
HECF 463 Preschool Administration .....	5
HECF 465 Parent Education .....	4
HECF 467 Theories of Child Development .....	4
HLTH 227 First Aid .....	3
HPES 485 Perceptual Motor Development in Children .....	3
HSS 310 Language Development .....	5
OR	
LING 270 The Nature of Language .....	5
OR	
PSY 307 Psycholinguistics .....	4
PSY 332 Abnormal Psychology .....	4
PSY 304 Cognitive Processes .....	4
OR	
PSY 376 Psychological Disorders of Childhood .....	4

#### Professional Education Requirements

EDCI 275 Learning Processes in the Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDCE 410 Human Relations .....	3
EDEL 306 Kindergarten - Theory and Methods .....	6
EDM 480 Intro to Educational Media .....	4
EDSP 270 Classroom Mgt. w/Problem Children 1 .....	3
EDSP 271 Intro to Educ of Exceptional Child & Youth .....	3
EDSP 272 Intro to Educ of MR Child & Youth .....	3
HECF 400*Senior Seminar .....	3
HECF 464*Early Childhood Practicum .....	6-12

#### Validation

The validation can be attached to an already existing kindergarten-primary, elementary, home economics, or special education certificate. The validation will provide an opportunity for individuals already working in a related field to develop skills necessary for working with children birth to six years of age.



## Courses required for validation:

HECF 160 Intro to Child Development .....	4
HECF 361 Preschool Guidance .....	4
HECF 363 Creative Exp. with Preschool Children .....	4
HECF 364 Premath and Science with Young Children .....	4
HECF 371 Family Development .....	3
HECF 399 Junior Practicum .....	5
OR	
HECF 464 Early Childhood Practicum .....	6
HECF 463 Preschool Administration .....	5
HECF 465 Parent Education .....	4

## Choose two from the following:

HECF 462A Pluralistic Lifestyles .....	2
HECF 462B Parenthood .....	2
HECF 462C Middle Childhood .....	2

**Early Childhood/Primary Education**

(Major code #6353)

This program prepares the student for teaching in nursery schools, child-care centers, Head Start Programs, prekindergarten, kindergarten, and primary grades (Grades 1-3) in public schools. The program meets the requirements for prekindergarten and kindergarten-primary teacher certification in Ohio.

**Required General Education Courses**

The courses listed fulfill the General Education Requirements for teacher certification. Students are encouraged to work closely with their faculty advisor to make certain that both University General Education and teacher certification requirements will be met.

**Science and Mathematics**

BOT 101 OR ZOO 101 Principles of Biology .....	5
MATH 120, 121, 122 Elementary Topics in Math .....	10
ZOO 103 Human Biology .....	5

(NOTE: These math courses are recommended; however, any math courses numbered above 120 (except MATH 151) and totaling 10 hours would be acceptable.)

**Comparative Arts and/or Philosophy**

MUS 160 Music Fundamentals .....	3
MUS 161 Music for Classroom Teachers .....	3
OR	
MUS 262 Music in Early Childhood .....	3

**Social Sciences**

GEOG 121 Elem. of Human Geog .....	4
PSY 101 General Psychology .....	5
SOC 101 Intro to Sociology .....	5

**English and/or Foreign Language**

Each student is required to complete at least two courses in English and/or Foreign Language. Freshmen and junior English composition courses taken to satisfy the University General Education Tier I requirement may be used toward completion of these hours. The two courses need not be in the same field.

In addition, students must complete INCO103 in order to be admitted to Professional Education within the College of Education.

**Thirty Hour Concentration**

A thirty hour concentration in one of the following areas is required: humanities, mathematics, natural sciences, or social sciences. An area of concentration may contain ten quarter hours that are presently used to meet the General Education Requirements in one of these areas. An area of concentration must contain at least ten quarter hours at the 300 level or above. Courses for an area of concentration must be selected from a pre-approved listing of courses that are acceptable as possible concentration courses.

**Specialized Requirements**

ART 360 Art for Elementary Teachers .....	6
ECON 103 Principles of Microeconomics .....	4

## OR

ECED 346 Economics in the Curriculum .....	4-5
EDEL 321, 321L Children's Literature & Lab .....	4
EDM 332 Microcomputer Applications in Education .....	4
HECF 360 Human Sexuality .....	3
HECF 361 Principles of Preschool Guidance .....	4
HECF 363 Creative Experiences w/ Preschool Children .....	4
HECF 364 Premath & Science Exper w/Young Children .....	4
HECF 371 Family Development .....	3
(Select 2)	

HECF 462A Pluralistic Life Styles .....	2
HECF 462B Parenthood .....	2
HECF 462C Middle Childhood .....	2
HECF 463 Preschool Administration .....	5
HECF 465 Parent Education .....	4
HEFN 128 Intro to Nutrition .....	4
HLTH 202 Health Sciences & Lifestyle Choices .....	4

## OR

HLTH 227 First Aid .....	3
HPES 270 Teaching of Physical Education .....	3
LING 270 Nature of Language .....	5
SOC 201 Contemporary Social Problems .....	4

## OR

SOC 223 American Society .....	4
Physical science course with laboratory component .....	4-5
U.S. History or Political Science course .....	4

**Professional Education Requirements**

EDCI 275 Learning Processes in Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDCE 410 Human Relations .....	3
EDCI 401 Advanced Urban Field Experience .....	2
EDEL 200 Studies of Children .....	4
OR	
HECF 160 Intro to Child Development .....	4
OR	
PSY 273 Child & Adolescent Psychology .....	4
EDEL 306 Kindergarten-Theory & Methods .....	6
EDEL 310, 310L Teach Language Arts .....	5
Elem School & Lab .....	5
EDEL 311, 311L Teach Reading Elem School & Lab .....	5
EDEL 330, 330L Teach Math Elem School (K-3) & Lab .....	3
EDEL 340 Teach Science Elem School .....	4
EDEL 350, 350L Teach Soc Studies Elem School & Lab .....	4
EDEL 372 Managing Elementary Classrooms .....	2
EDEL 460 The Child & the Curriculum .....	4
EDM 480 Intro to Educational Media .....	4
EDPL 461, 462 Student Teaching .....	13
EDPL 465 Student Teaching Seminar .....	3
EDSP 160 Field Experience Special Education .....	1
EDSP 271 Intro Education of Except Children & Youth .....	4
HECF 400 Senior Seminar .....	3
HECF 464 Early Childhood Practicum .....	6

**Family Studies**

(Major code #6351)

This program prepares students for working with clients of various developmental levels such as children, adolescents, and seniors. Employment opportunities include family services, children's services, adolescent group homes, rehabilitation centers, community programs for the developmentally disabled, senior citizen centers, planned parenthood centers, childrens hospitals, adoption agencies, mental health agencies, and probation services.

**Home Economics Basic Requirements**

HECE 395 Home Mgt. ....	3
OR	
HECE 452 Home Mgt for Disabled Homemakers .....	4
HECE 390 Family Consumer Econ. ....	3
HEFN 128 Intro to Nutrition .....	4
HEID 180 Intro to Residential Design .....	3

**Specialized Requirements**

HECF 160* Intro to Child Devel. ....	4
HECF 370 Family Living .....	3
HECF 361 Preschool Guidance .....	4

HECF 299* Soph. Practi. Prof. Assessment .....	5
HECF 371* Family Devel. ....	3
HECF 360 Human Sexuality .....	3
HECF 380 Death and Dying .....	4
HECF 399* Jr. Practi. Prof. Devel. ....	5
HECF 462A Pluralistic Life Styles .....	2
HECF 462B Parenthood .....	2
HECF 462C Middle Childhood .....	2
HECF 462D One-Parent Family .....	2
HECF 462E Youth Identity Crisis .....	2
HECF 462F Aging Family .....	2
HECF 400 Sr. Seminar .....	3
HECF 499* Field Experiences .....	12
HECE 444 Adult Education .....	4
OR	
HECF 465 Parent Education .....	4
OR	
HECF 471 Family Life Education .....	4

### Required Related Courses

EDCE 410 Human Relations .....	3
HLTH 227 First Aid .....	3
HS 309 Microcomputer Appl. in Hlth Sci. ....	4
MGT 200/300 Intro to Mgt./Mgt. ....	4
PSY 121 Elem. Statistics for Behavioral Sciences .....	5
PSY 231 Psych. of Adjustment .....	4
PSY 233 Psych. of Personality .....	4
SOC 414 Contemporary Social Movements .....	4
OR	
SOC 416 Society and the Individual .....	4
SOC 361 Deviant Behavior .....	4
OR	
SOC 363 Juvenile Delinquency .....	4
SW 290 American Social Welfare System .....	4
SW 390 Social Policy .....	4
SW 383 Intro to Social Work Practice Methods .....	4
Approved electives .....	20-24

### Home Economics in Business

(Major code #6374)

This is a special option which can be combined with other areas of home economics. Students are prepared for positions as home economists with newspapers, magazines, radio and television companies, department stores, and manufacturing companies.

Students interested in this major should see an advisor in the area of Family Studies and Community Services for more details. *Students must complete a program proposal and have it accepted by the faculty within the area before being admitted into this program option.*

Components of the program include:

General Education (50-55 hours)

Home Economics (64-65 hours)

Home Economics Core (16-17 hours)

Home Economics Field and Practica (23 hours)

Home Economics Specialized (25 hours)

Business and Communication Core (26 hours)

Business and Communication Core (26 hours)

Business or Communication Focus (34 hours)

### Vocational Home Economics Education

Vocational Home Economics Education prepares students for teaching home economics in junior and senior high schools and in adult education through two programs: the Consumer and Homemaking Program and the Job Training Certification Program.

Basic course requirements for all home economics education majors are listed below.

### Required General Education Courses

The current state of Ohio requirements for teacher certification state that a person applying for a teaching certificate must complete 45 quarter hours of general education courses well distributed in the areas of science

and mathematics; social sciences; English and/or foreign language; and comparative arts and/or philosophy.

Students must also complete Ohio University's General Education Requirements (see General Education Requirement in the Graduation Requirements section of this catalog). Students are encouraged to work closely with their faculty advisor to make certain that both University General Education and teacher certification general education requirements will be met.

The breakdown of these teacher education general education course requirements is:

#### Science and Mathematics

Each student is required to complete at least one course in science and one course in mathematics. Appropriate science courses are: chemistry, botany, physics, zoological and biomedical sciences, or physical science. The Tier I "quantitative skills" requirement may be used to fulfill the mathematics requirement.

#### Comparative Arts and/or Philosophy

Each student is required to complete at least two courses in this area, with at least one of them being an applied art course. The two courses need not be in one field. Possibilities include any course in Philosophy; Comparative Arts; HUM 107, 108, 109, 307, 308 or 309; Art History; Art (except 360, 461, and 462); Music (except music education courses, music therapy courses, and the one- and two-hour participation courses); and Theater History courses.

#### Social Sciences

Each student is required to complete at least two courses in social sciences. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses.

#### English and/or Foreign Language

Each student is required to complete at least two courses in English and/or Foreign Language. Freshman and junior English composition courses taken to satisfy the University General Education Tier I Requirement may be used toward completion of these hours. The two courses need not be in the same field.

In addition, students must complete INCO 103 in order to be admitted to Professional Education within the College of Education.

### Consumer and Homemaking Program

(Major code #6370)

The Consumer and Homemaking Program prepares a person for two four-year provisional certificates (high school and vocational consumer and homemaking) which qualifies the holder to teach either general home economics or vocational consumer and homemaking in grades 7-12, inclusive.

#### Home Economics Basic Requirements

HECE 395 Home Mgt. ....	3
HECF 371* Family Devel. ....	3
HEFN 128* Intro to Nutrition .....	4
HEID 180* Intro to Residential Design .....	3

#### Specialized Requirements

HECE 340 Tchng. Home Econ. ....	4
HECE 390 Family Consumer Econ. ....	3
HECE 391 Equipment .....	4
HECE 299* Soph Practicum .....	5
HECE 396 Home Mgt. Lab. ....	4
HECE 399* Junior Practicum .....	5
HECF 160* Intro to Child Devel. ....	4
HECF 361 Preschool Guidance .....	4
HEFN 120* Meal Mgt. ....	3
HEFN 222* Food Science Prin. ....	4
HETC 117* Textiles & Dress & Envir. ....	3
HETC 213* Design Analysis: Theory & Prin. ....	5
HETC 315 Elem. Textiles .....	4

Upper Level Textiles & Clothing (select at least one 3-hour course):

HETC 313 Design Analysis: Experimental .....	4
HETC 316 Design Analysis: Tailoring .....	4
HETC 405A History of Costume .....	4

HEFC 415 Design Analysis: Flat Pattern .....	4
HEFC 454 Clothing for Persons with Special Needs .....	3
Upper Level Interior Design (select at least one 3 hour course):	
HEID 384 Interior Design Programming .....	3
HEID 480 History of Furniture .....	3
HEID 481 Contemporary Design in Furnishings .....	3
HEID 482 The Decorative Arts .....	3
Upper Level Food & Nutrition (select at least one 3 hour course):	
HEFN 382 Intermediate Nutrition .....	4
HEFN 422 Experimental Foods .....	4
HEFN 426 World View of Nutrition .....	3
HEFN 429 Community Nutrition .....	3
Upper Level Child Development/Family Life (select at least 2 courses for a minimum of 6 hours—one Child [C] and one Family [F]):	
HECF 360 Human Sexuality (F) .....	3
HECF 363 Creative Exper w/Preschool Children (C) .....	4
HECF 365 Infant Education (C) .....	4
HECF 380 Death and Dying (F) .....	4
HECF 462A Pluralistic Life Styles (F) .....	2
HECF 462B Parenthood (F) .....	2
HECF 462C Middle Childhood (C) .....	2
HECF 462D The One Parent Family (F) .....	2
HECF 462E Youth Identity Crisis (C) .....	2
HECF 462F The Aged Family (F) .....	2
HECF 465 Parent Education (C) .....	4
HECF 467 Theories of Child Development (C) .....	4
HECF 471 Family Life Education (F) .....	4

### Professional Education Requirements

EDCI 275 Learning Processes in Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDCI 401 Advanced Urban Field Experience .....	2
EDCI 480 The Teacher, School & Society .....	3
EDM 480A Intro to Educational Media .....	2
OR	
EDM 480 Intro to Educational Media .....	4
EDPL 463, 464 Student Teach in Secondary Schools .....	13
EDPL 465 Student Teaching Seminar .....	3
EDSE 250, 250L Analysis Teach Char & Teach Tasks & Lab .....	6
EDSE 270, 270L Studies of Learner: Devel & Except .....	4
EDSE 351 Middle & High School Instruct & Curriculum .....	5
EDSE 420, 420L Teach of Reading in Content Area & Lab .....	5

### Job Training Certification Program: Child Care Services, Food Service, or Community and Home Service

The Job Training Certification Program prepares a person for a four-year provisional vocational job training certificate in a specific content field which qualifies the holder to teach that content area in a vocational home economics job training program. Students may complete requirements for job training certification by taking coursework in a specialized area of home economics. Permission must be granted by the home economics education advisor prior to declaring this major.

## Food and Nutrition

### Program Standards

To remain active in any program option listed as Food and Nutrition, a student must meet the following criteria:

1. Maintain overall g.p.a. of 2.0 (C) or better in all hours attempted at Ohio University.
2. Earn at least a 2.0 (C) in each HEFN course listed under Major Requirements and all Required Related Courses (dietetics and community nutrition majors and nutrition with science majors).

OR

Earn at least a 2.0 (C) in each HEFN course listed under Major Requirements (food service management majors).

**NOTE:** Students applying for a post-graduation internship or preprofessional practice program should be aware that

internship and preprofessional practice program sites generally require a minimum accumulative grade-point average (g.p.a.) of 3.0 or higher. Completing the graduation requirements of Ohio University and meeting Plan IV requirements of the Department of Food and Nutrition's American Dietetic Association (ADA) approved program does not guarantee acceptance into post baccalaureate programs for professional experience. The student must apply to and be granted acceptance into such programs to pursue the experiential component toward becoming a Registered Dietitian (R.D.).

### Dietetics and Community Nutrition

(Major code #6360)

This program meets American Dietetic Association academic requirements qualifying students for internship in general dietetics — Plan IV.

### Home Economics Basic Requirements

HECE 390 Family Consumer Economics .....	3
OR	
HECE 444 Home Economics in Adult Education .....	4
HECF 160 Intro to Child Development .....	4
OR	
HECF 371 Family Development .....	3
HEID 180 Intro to Residential Design .....	3

### Major Requirements

HEFN 120* Meal Management .....	3
HEFN 128 Intro to Nutrition .....	4
HEFN 222 Food Science & Principles .....	4
HEFN 299 Soph. Practicum—Prof. Awareness .....	1
HEFN 334 Quantity Food Production .....	4
HEFN 335 Food Service Purchasing .....	4
HEFN 382 Intermediate Nutrition .....	4
HEFN 399** Field Experience .....	5
HEFN 400 Senior Seminar .....	1
HEFN 422 Experimental Foods .....	4
HEFN 426 World View of Nutrition .....	3
HEFN 428 Advanced Nutrition .....	4
HEFN 429 Community Nutrition .....	3
HEFN 430 Therapeutic Nutrition .....	4
HEFN 437 Food Service Systems I .....	5
HEFN 438 Food Service Systems II .....	4
HEFN 498A Nutrition Counseling .....	2
HEFN 499A** Nutrition Counseling Practicum .....	3

### Required Related Courses

ACCT 201 Financial Accounting .....	4
ANTH 101 Intro to Cultural Anthropology .....	5
ART 101 Two-Dimensional Design .....	4
OR	
ART 102 Three-Dimensional Design .....	4
OR	
ART 151 Intro to Graphic Design .....	4
CHEM 121, 122, 123 Principles of Chemistry .....	12
OR	
CHEM 151, 152, 153 Fundamentals of Chemistry .....	15
CHEM 301, 302 Organic Chemistry .....	6
CS 120 Computer Science Survey .....	5
OR	
HS 309 Microcomputer App .....	4
EDCI 275 Learning Processes in Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
ECON 103 Principles of Microeconomics .....	4
ECON 104 Principles of Macroeconomics .....	4
HRM 420 Human Resource Management .....	4
INCO 101 Fundamentals of Human Communication .....	4
OR	
INCO 103 Fundamentals of Public Speaking .....	4
JOUR 250 Advertising Principles .....	4
MATH 113 Algebra .....	5
MGT 300 Management .....	4
MICR 211, 212 Environmental Microbiology & Lab .....	6
OR	
MICR 411 General Microbiology .....	6
PSY 101 General Psychology .....	5

PSY 121 Elem Statistics for Behavioral Sciences .....	5
SOC 101 Intro to Sociology .....	5
ZOOL 101 Principles of Biology .....	5
ZOOL 300 Anatomy & Histology .....	6
ZOOL 345 Human Physiology .....	4
ZOOL 463 Cell Chemistry .....	4
Approved humanities, literature, or language elective .....	4
*Must obtain a laboratory coat to be worn in foods lab (approx. \$30)	
**Must secure liability insurance (approx. \$35)	

## Food Service Management

(Major code #6361)

This program with a built-in business minor, prepares students for careers in management and supervision in hotels, motels, restaurants, public schools, residence halls, and industry. It is strongly recommended that students majoring in food service have a part-time job in a hospitality establishment in order to be more marketable upon graduation.

### Home Economics Basic Requirements

HECE 390 Family Consumer Economics .....	3
OR	
HECE 444 Home Economics in Adult Education .....	4
HECF 160 Intro to Child Development .....	4
OR	
HECF 371 Family Development .....	3
HEID 180 Intro to Residential Design .....	3

### Major Requirements

HEFN 110 Intro to Hospitality .....	3
HEFN 120* Meal Management .....	3
HEFN 128 Intro to Nutrition .....	4
HEFN 222 Food Science & Principles .....	4
HEFN 330 Food Sanitation and Safety .....	2
HEFN 334 Quantity Food Production .....	4
HEFN 335 Food Service Purchasing .....	4
HEFN 382 Intermediate Nutrition .....	4
HEFN 399** Field Experience .....	5
HEFN 400 Senior Seminar .....	1
HEFN 437 Food Service Systems I .....	5
HEFN 438 Food Service Systems II .....	4
HEFN 439 International Cuisine .....	4
HEFN 498B Food Service Professional Development .....	2
HEFN 499B** Food Service Practicum .....	3

### Required Related Courses

ACCT 201 Financial Accounting .....	4
ACCT 202 Managerial Accounting .....	4
BUSL 255 Law & Society .....	4
CHEM 121 Principles of Chemistry .....	4
MIS 100 Intro to Microcomputers .....	3
OR	
HS 309 Microcomputer App .....	4
ECON 103 Principles of Microeconomics .....	4
ECON 104 Principles of Macroeconomics .....	4
EDCI 275 Learning Processes in Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
HRM 420 Human Resource Management .....	4
HRM 425 Labor Relations .....	4
INCO 101 Fundamentals of Human Communication .....	4
OR	
INCO 103 Fundamentals of Public Speaking .....	4
JOUR 250 Advertising Principles .....	4
MGT 300 Management .....	4
MIS 300 Business Information Systems .....	4
MKT 301 Marketing Principles .....	4
PSY 101 General Psychology .....	5
PSY 121 Elementary Statistics for Behavioral Sciences .....	5
OR	
ECON 381 Intro to Economic Statistics .....	4
SOC 101 Intro to Sociology .....	5
Approved humanities, literature, or language elective .....	4
Elective in business, finance, management, or marketing .....	12
*Must obtain a laboratory coat to be worn in foods lab (approx. \$30)	
**May need to secure liability insurance (approx. \$35)	

## Nutrition with Science (Zoology)

(Major code #6363)

This program meets American Dietetic Association academic requirements qualifying students for internships with clinical emphasis—Plan IV. It also provides a basis for those students desiring graduate study and research in nutrition and/or zoology. Certain other preprofessional undergraduates, such as those in premedicine, with a strong interest in nutrition, will find the program satisfies requirements for admittance to professional schools. A student can major either in human nutrition and food science in the School of Home Economics, College of Health and Human Services, or in the Department of Zoological and Biomedical Sciences in the College of Arts and Sciences.

### Major Requirements

HEFN 120* Meal Management .....	3
HEFN 128 Intro to Nutrition .....	4
HEFN 222 Food Science & Principles .....	4
HEFN 299 Soph Practicum-Professional Awareness .....	1
HEFN 334 Quantity Food Production .....	4
HEFN 335 Food Service Purchasing .....	4
HEFN 382 Intermediate Nutrition .....	4
HEFN 399** Field Experience .....	5
HEFN 400 Senior Seminar .....	1
HEFN 422 Experimental Foods .....	4
HEFN 426 World View of Nutrition .....	3
HEFN 428 Advanced Nutrition .....	4
HEFN 429 Community Nutrition .....	3
HEFN 430 Therapeutic Nutrition .....	4
HEFN 437 Food Service Systems I .....	5
HEFN 438 Food Service Systems II .....	4
HEFN 498A Nutrition Counseling .....	2
HEFN 499A** Nutrition Counseling Practicum .....	3

\*Must obtain a laboratory coat to be worn in foods lab (approx. \$30)

\*\*Must secure liability insurance (approx. \$35)

### Required Related Courses

CHEM 151, 152, 153 Fundamentals of Chemistry .....	15
CHEM 301, 302 Organic Chemistry .....	6
ECON 103 Principles of Microeconomics .....	4
ECON 104 Principles of Macroeconomics .....	4
HECE 444 Home Economics in Adult Education .....	4
HECF 160 Intro to Child Development .....	4
OR	
HECF 371 Family Development .....	3
HEID 180 Intro to Residential Design .....	3
INCO 101 Fundamentals of Human Communication .....	4
OR	
INCO 103 Fundamentals of Public Speaking .....	4
JOUR 250 Advertising Principles .....	4
MATH 163A, 163B Intro to Calculus .....	7
MGT 300 Management .....	4
MICR 211, 212 Environmental Microbiology & Lab .....	6
OR	
MICR 411 General Microbiology .....	6
PHYS 201, 202 Intro to Physics .....	8
PSY 101 General Psychology .....	5
PSY 121 Elem Statistics for Behavior Science .....	5
PSY 275 Educational Psychology .....	4
SOC 101 Intro to Sociology .....	5
ZOOL 170 Intro to Zoology .....	6
ZOOL 171 Intro to Zoology .....	5
ZOOL 172 Intro to Zoology .....	4
ZOOL 173 Intro to Zoology .....	1
ZOOL 300 Anatomy & Histology .....	6
OR	
ZOOL 303 Comparative Vertebrate Anatomy .....	6
ZOOL 325 General Genetics .....	5
ZOOL 463 Cell Chemistry .....	4
ZOOL 464 Physiological Chemistry Lab .....	3
ZOOL 482D Mammalian Physiology .....	3
OR	
ZOOL 460 Animal Physiology .....	4

### Additional Suggested Courses

CS 120 Computer Science Survey .....	5
OR	
HS 309 Microcomputer App .....	4

The course sequence should be adhered to closely and always in consultation with an advisor assigned to the student either in the School of Home Economics or the Department of Zoological and Biomedical Sciences.

## Interior Design

(Major code #6383)

This program is accredited by the Foundation for Interior Design Education Research (FIDER) and prepares students for entry positions in the field of interior design.

### Program Standards

To remain active as an interior design major, a student must meet the following criteria:

1. Earn at least a 2.0 (C) in each studio course marked with an asterisk (\*)
2. Submit and pass a portfolio review at the end of HEID 281. Portfolio must include work from IT 104 and IT 105, Studio Art Foundation courses, and Interior Design Studios.
3. Must be enrolled in an advanced studio during senior year.

### Home Economics Basic Requirements

HECE 390 Consumer Econ. ....	3
OR	
HECE 452 Home Mgt. for Disabled Homemaker ....	4
HECF 160 Child Development ....	4
OR	
HECF 371 Family Development ....	3
HEFN 128 Intro Nutrition ....	4
HETC 315 Elem. Textiles ....	4

### Major Requirements

HEID 180 Intro to Residential Design ....	3
HEID 181 Color Theory ....	4
HEID 279 Rendering & Presentation Techniques ....	4
HEID 280*Interior Design Studio I ....	4
HEID 282*Interior Design Studio III ....	4
HEID 288 Lighting Fundamentals ....	3
HEID 299 Professional Practices ....	2
HEID 340 Interior Design CAD ....	3
HEID 350 Prin. Mater & Meth of Inter Construct I ....	3
HEID 351 Prin. Mater & Meth of Inter Construct II ....	3
HEID 352 Business Procedures and Contract Documents ....	3
HEID 384 Interior Design Programming ....	3
HEID 400 Senior Seminar-Prof Evaluation ....	1
HEID 480 History of Furniture and Interiors ....	3
HEID 481 Contemporary Design in Furnishings ....	3
HEID 482 The Decorative Arts ....	3
HEID 483*Advanced Interior Design Studio I ....	4
HEID 484*Advanced Interior Design Studio II ....	4
HEID 485*Advanced Interior Design Studio III ....	4
HEID 499 Field Work-Interior Design ....	5-12

### Required Related Courses

ART 102 Three-Dimensional Design ....	4
ART 128 Intro to Drawing ....	4
(Select 3)	
CA 350 Principles of Architecture ....	4
CA 351 Ancient Architecture ....	4
CA 352 Medieval Architecture ....	4
CA 353 Renaissance & Baroque Architecture ....	4
CA 354 19th & 20th Century Architecture ....	4
ECON 103 Principles of Microeconomics ....	4
INCO 103 Fundamentals of Public Speaking ....	4
IT 104 Architectural Drawing I ....	5
IT 105 Architectural Drawing II ....	5
JOUR 250 Advertising Principles ....	4
Approved business electives ....	12

## Textiles and Clothing

### Program Standards

To remain active in any program option listed as fashion merchandising, a student must meet the following criteria:

1. Maintain overall g.p.a. of 2.0 (C) or better in all hours attempted at Ohio University.
2. Maintain a g.p.a. of 2.0 (C) or better in all courses listed under Major Requirements.
3. No grade below a C is acceptable toward completion of the course(s) identified by an asterisk (\*) in the option listing.

A student must succeed in a required program course by the third time he or she enrolls in the course. If the student does not meet this requirement, he or she will be dropped from the program. Success is a passing grade, or a grade of C in those courses where a minimum grade of C is required.

## Fashion and Retail Merchandising

(Major code #6380)

This program prepares students for retail managerial and promotional positions such as buyer, fashion coordinator, or consultant in department stores or traveling stylist for pattern or fabric manufacturers; for promotional instruction and demonstration; and for fashion writing.

### Home Economics Basic Courses

Select three from the following:

HECE 390 Family Consumer Econ. ....	3
HECF 160 Intro to Child Development ....	4
OR	
HECF 371 Family Development ....	3
HEFN 128 Intro to Nutrition ....	4
HEID 180 Intro to Residential Design ....	3

### Major Requirements

HETC 315* Elem. Textiles ....	4
HETC 117 Textiles & Dress & Envir. ....	3
HETC 213* Design Analysis Theory & Prin. ....	5
HETC 313 Design Analysis Experimental ....	4
HETC 318 Fashion Merchandising - Promotion ....	4
HETC 407 Fashion Industries ....	4
HETC 405A History of Costumes ....	4
HETC 417* Fashion Merchandising - Mgt. ....	4
HETC 418 Textile Testing ....	4
HETC 437 Strategic Merchandise Planning ....	4
HETC 299* Soph. Practl.-Prof. Assessment ....	4
HETC 399* Jr. Practl.-Prof. Devel. ....	3
HETC 499* Field Work: Merchandising ....	12
HETC 400* Sr. Seminar ....	1

### Required Related Courses

ACCT 201 Financial Acct. ....	4
ART 101 or 102, 128 Dimensional Design, Basic Drawing ....	8
CHEM 121, 122, 123 Principles of Chemistry ....	12
OR	
CHEM 121, HETC 355, Intermediate Textiles, and 1 approved related science course ....	12-14
CS 120 Computer Science Survey ....	5
OR	
HS 309 Microcomputer App. In Hlth Ser (or other approved computer course) ....	4
ECON 103, 104 ....	8
ENG 305J, ENG 308J, HECE 345J, or MGT 325J ....	4-5
INCO 103 Pub. Spkng. ....	4
JOUR 250 Advert. Prin. ....	4
MATH 113 Algebra ....	5
MKT 301 Mkt. Prin. ....	4
MGT 200 or 300 Management ....	4
PSY 101 Gen. Psych. ....	5
SOC 101 Intro to Soc. ....	5
Comparative arts (1 quarter) ....	4
Approved general education electives ....	7
Approved business/communication electives ....	4
Approved upper-level business electives ....	12

## Minor in Basic and Applied Nutrition

### Program Standards

To remain active in this minor option, a student must meet the following criteria:

1. Maintain overall g.p.a. of 2.0 (C) or better in all hours attempted at Ohio University.
2. Earn at least a 2.0 (C) in all HEFN courses listed under Minor Requirements.

The objective of this minor is to give students in other health fields the opportunity to strengthen their knowledge of nutrition principles and applications. Students completing this minor are prepared to provide basic information and guidance concerning nutrition and diet and to help others identify reliable nutrition resources in the community. A minimum of 29 to 31 hours are required for the minor plus any necessary prerequisites. Successful completion of this program is indicated on the student's permanent record.

### Requirements

- A. 26-29 hours in supporting sciences, 12 hours of which may be applied toward the minor. (These courses are all prerequisites to upper level HEFN courses.)
 

CHEM 121, 122, 123 Principles of Chemistry .....	12
OR	
CHEM 151, 152, 153 Fundamentals of Chemistry ....	15
CHEM 301, 302 Organic Chemistry .....	6
ZOOL 345 Human Physiology .....	4
ZOOL 463 Cell Chemistry .....	4
- B. 18-20 hours in nutrition courses
 

HEFN 128 Intro to Nutrition .....	4
HEFN 382 Intermed. Nutrition .....	4
HEFN 428 Advanced Nutrition .....	4
HEFN 430 Therapeutic Nutrition .....	4
HEFN 429 Community Nutrition .....	3
HEFN 427 Studies in Foods and Nutrition (opt.) ....	2-4

## SCHOOL OF NURSING

M. Kathy Rose-Grippa, *Director*

### BACCALAUREATE PROGRAM

(Major code # 1203)

The School of Nursing offers a National League for Nursing accredited baccalaureate program for registered nurses and awards the Bachelor of Science in nursing degree. The program is designed for students who are licensed graduates of state-approved associate degree or diploma programs. Courses are offered on the regional campuses as well as on the Athens campus, increasing availability for professional development and/or career mobility for registered nurses. The purpose of the program is to prepare generalists for professional practice of nursing and to provide the foundation for graduate study.

The program leads to a major in nursing through a curriculum including required nursing education and University General Education Requirements, as well as upper division coursework in disciplines outside of nursing.

The student's admission to and progression through the program includes the following steps: (1) *Admission to Ohio University*—after initial review and individual appraisal of student records of previous coursework, admitted students are informed of the program prerequisites they must meet and oriented to the expectations and structure of the program; (2) students may then enroll in courses to complete the program prerequisites; (3) when these prerequisites have been met, students are admitted into the nursing major and complete the required nursing courses in sequence.

Many of the nursing courses have a clinical component provided to operationalize theory in practice. The clinical

experiences occur in a broad range of traditional and nontraditional health care and health maintenance settings. The communities surrounding the classroom locations are used whenever possible. These clinical experiences have been carefully selected to optimize learning. Students are responsible for transportation to the clinical experiences.

A grade of 2.0 (C) or better must be earned in each course offered by the School of Nursing (NBSP series). If a grade of C is not earned, the student must repeat the course before progressing to the next course in the sequence. A student must file a Repeated Course Form with the dean's office in order to have the C-or-better grade counted for graduation and point-hour ratio.

At the completion of the program prerequisites (90 quarter hours consisting of lower division nursing and general education courses) and 102 quarter hours of upper division nursing, general education, and support courses, the student is eligible to receive the Bachelor of Science in nursing degree.

### PROGRAM PREREQUISITES

#### I. Lower Division Nursing (36 qtr. hours)

- A. Transfer credit (36 qtr. hours) is awarded to applicants with an associate degree in nursing from a regionally accredited college or university.
- B. Credit (36 qtr. hours) is awarded to applicants with a diploma in nursing upon completion of specified ACT Proficiency Examinations.

#### II. University General Education Requirements (54 qtr. hours)

- A. Tier I Requirement
  1. \*Freshman English Composition  
English (151, 152, or 153)
  2. Quantitative Skills  
Psychology (121)
- B. Tier II Requirement
  1. Social Sciences  
\*Introduction to Sociology (101)  
\*Introduction to Psychology (101)  
\*Growth and Development (PSY 273, HECF 160, or EDEL 200)
  2. Natural Science and Mathematics  
\*Chemistry I (CHEM 121 or 151)  
\*Anatomy and Physiology
  3. Applied Science and Technology  
Human Nutrition (HEFN 128)  
Microbiology (MICR 211 and 212 or 310)
  4. Fine Arts and Humanities (4 credit hours) or  
Third World Culture (4 credit hours)

#### III. Electives (8-10 qtr. hours)

Includes attendance at School of Nursing orientation and completion of the following course: NBSP 295.

\*College Level Examination Program (CLEP) available for applicants who do not have college or university transfer credit and who wish to establish proficiency for these prerequisites in this manner.

### PROGRAM REQUIREMENTS

1. Graduate of state-approved associate degree or diploma program in nursing
2. Admission to Ohio University
3. Evaluation of official transcripts from lower-division nursing program and any other post secondary education
4. Completion of program prerequisites
5. Attendance at orientation to the nursing program, in-



cluding NBSP 295, before beginning nursing major sequence.

6. Prior to enrolling in NBSP courses, one must have:
  - a. current Ohio license to practice as an RN in Ohio
  - b. individual malpractice insurance
  - c. up-to-date immunizations
  - d. annual TB skin test
  - e. current CPR certification

## CURRICULUM

### Required Nursing Education (60 qtr. hours)

#### Junior Sequence

NBSP 300 Transitions in Nursing .....	5
NBSP 310 Health Appraisal I .....	5
NBSP 320 Health Appraisal II .....	5
NBSP 330 Family Nursing .....	5
NBSP 340 Community Health Nursing .....	5
NBSP 360 Management Issues in Nursing .....	5

#### Senior Sequence

NBSP 400 Research: Critique & Methodology .....	5
NBSP 415 Restorative Nursing .....	5
NBSP 425 Clinical Applications in Nursing .....	5
NBSP 440 Strategic Planning in Nursing Care .....	5
NBSP 460 Trends & Issues of Professional Nursing .....	5

#### Elective in Nursing (select one)

NBSP 465 Teaching: Theory and Strategies .....	5
NBSP 475 Gerontic Nursing .....	5
NBSP 485 Legal Issues in Nursing .....	5
NBSP 495 Critical Care Nursing .....	5
NBSP 490 Independent Study .....	1-5

### Required General Education/Support Courses (42 qtr. hours)

Students may select Option A or Option B to meet the upper division course requirements. With either plan, consultation with the major advisor is necessary.

#### Option A:

Select coursework as indicated in the following areas (300 or 400 level):

##### Behavioral Sciences

- Psychology (select one)
- Sociology (select one)
- Human Relations (select one)

##### Biological Sciences (select one)

##### Humanities (select one)

##### Junior Level Advanced Composition (select one course with the "J" designation)

##### Tier III Synthesis Course (select one)

##### Electives

Students may select from 300- and 400-level courses in any area. May use 1-5 credit hours of O.U. workshop courses to fulfill upper division credit hour requirements.

#### Option B:

Students may choose to complete a minor course of study, a second major, or one of the available certificate programs, e.g., School Nurse or Gerontology.

## SCHOOL NURSE CERTIFICATE PROGRAM

Students who are licensed as RNs in the state of Ohio are eligible to apply for admission to the School Nurse Certificate Program. Students choose one of three plans:

1. Those RNs with a B.S.N. degree take only those additional courses required to meet the state's certification requirements.
2. Those RNs who wish to complete the B.S.N. and the School Nurse Certificate simultaneously follow the

B.S.N. program of study and use the required School Nurse Certificate courses as part of that degree, or

3. Those RNs who seek to complete a B.S. degree not in nursing will need to consult with the advisor in their chosen major and the School Nurse Certificate advisor to develop a program of study.

Individuals who do not have a B.S. degree in some area will need to earn one. This will involve meeting Ohio University's General Education Requirements and graduation requirements in addition to the major requirements and the School Nurse Certificate requirements. Each applicant's file will be individually reviewed, and credit transferred from other accredited institutions will be used to meet requirements wherever possible. Graduates of diploma programs in nursing may earn 36 quarter hours of credit for lower division nursing upon completion of specified ACT-PEP exams.

## Certificate Requirements

1. The following are required of all individuals seeking the School Nurse Certificate.

- A. Admission to professional education during the first quarter at Ohio University. Contact School Nurse advisor in School of Nursing for procedure.

#### B. Coursework

EDCI 275 Learning Processes in the Classroom .....	5
OR	
PSY 275 Educational Psychology .....	4
EDCI 480 Teacher, School, and Society .....	3
OR	
EDEL 460 The Child and the Curriculum .....	4
EDPL 461 Student Teaching in Elementary Schools .....	7
EDPL 463 Student Teaching in Secondary Schools .....	6
EDPL 465 Student Teaching Seminar .....	3
HECF 360 Human Sexuality .....	3
HLTH 204 Drugs, Alcohol, and Tobacco .....	3
HLTH 419 Health Education in Elementary Schools .....	4
HLTH 495 School Health Problems .....	5
NBSP 300 Transitions in Nursing .....	5
NBSP 310 Health Appraisal I .....	5
NBSP 320 Health Appraisal II .....	5
NBSP 330 Family Nursing .....	5
NBSP 340 Community Health Nursing .....	5
PSY 231 Psychology of Adjustment .....	4
OR	
PSY 332 Abnormal Psychology .....	4

- C. Complete Application for Student Teaching by December 1 of the year before you plan to complete the school nurse student teaching requirement.

2. Those individuals completing a B.S. degree not in nursing must complete two courses in addition to those listed in #1B.

EDSP 271 Intro to Education of Exceptional Children and Youth .....	3
HPES 390 Safety Education .....	4

3. RNs who hold a B.S.N. from another university will likely meet the nursing course requirements listed in #1B through transfer of credit. Course descriptions from previous schools may be required to determine equivalent coursework.

Requirements are subject to change in accordance with changes in state certification standards.

## SCHOOL OF PHYSICAL THERAPY

Cynthia Norkin, *Director*

The School of Physical Therapy, accredited by the American Physical Therapy Association (APTA) in 1986, offers an initial preparation program in physical therapy. Built on a prephysical therapy liberal arts and sciences foundation, the professional education program extends over a two-calendar year period and leads to a baccalaureate degree.

The baccalaureate-level curriculum includes major components related to basic and clinical sciences, physical therapy arts and sciences, health services administration, research, and education with the intent of preparing graduates who are competent physical therapy practitioners and health care professionals. The curriculum reflects a systems-oriented, problem-solving design and includes didactic, laboratory, and clinical components.

The clinical component of the curriculum is integrated with the didactic and laboratory components throughout the program of study. In five of the academic quarters, physical therapy students receive part-time clinical education in local clinics (community hospitals, home health agencies, extended care facilities, developmental disabilities centers, and private practices) supervised by faculty and staff from Therapy Associates, the School's faculty practice.

In addition to the part-time clinical affiliations, three full-time clinical practica are required in clinical facilities located outside of the Athens area. The School of Physical Therapy has agreements with a large variety of medical centers, general acute hospitals, rehabilitation centers, and specialty clinics in Ohio, as well as in Arizona, California, Florida, Indiana, Illinois, Kentucky, Louisiana, Michigan, Mississippi, New York, North Carolina, Pennsylvania, Tennessee, Virginia, and West Virginia.

Students are responsible for their own transportation to and from clinical sites and for housing and other living expenses during all of their affiliations. Students also are required to acquire CPR certification prior to participation in full time practica and to have had a physical examination including evidence of T.B. testing. Because students may be exposed to infectious diseases during their affiliations, some sites may require proof of immunization for selected diseases. In addition, all students must purchase name tags and malpractice insurance to be eligible for participation in the clinical practica. Membership in the American Physical Therapy Association and attendance at state conferences are encouraged.

The School of Physical Therapy has submitted a request to the Ohio Board of Regents to convert the existing baccalaureate-level program in physical therapy to an entry-level graduate program leading to a Master of Physical Therapy degree. Applicants to the new master's program must have completed a baccalaureate degree in another field prior to enrollment in the program. (See Selection Procedure for more details.)

### FINANCIAL AID

The Ohio University Office of Student Financial Aid and Scholarships assists students who need help in financing their college educations. In addition to scholarships and loans available through the Office of Student Financial Aid and Scholarships, physical therapy majors may be eligible for Area VI scholarships and CHHS Alumni scholarships. Some clinical facilities and private physical therapy corporations offer stipends to students enrolled in the professional sequence of courses.

## ADMISSION AND SELECTION PROCEDURES

### Admission Procedures

#### Ohio University Students

Prospective physical therapy students who are currently attending Ohio University are to:

1. Obtain a Program Admission Packet from the School of Physical Therapy.
2. Complete and return the program admission forms and information to the School of Physical Therapy no later than November 18, 1991.
3. Submit an official Ohio University transcript to the School of Physical Therapy.

#### Ohio University Graduates

Prospective physical therapy students who have graduated from Ohio University are to:

1. Obtain a Re-Enrollment Form from the Office of Admissions, Chubb Hall.
2. Complete and return the Re-Enrollment Form to the Office of Admissions.
3. Obtain a Program Admission Packet from the School of Physical Therapy.
4. Complete and return the program admission forms and information to the School of Physical Therapy no later than November 18, 1991.
5. Submit an official Ohio University transcript.

#### Transfer from Another Institution

Prospective students not in attendance at Ohio University are to apply to the University as transfer students.

1. Follow procedures for admission as a transfer student as outlined in this catalog.
2. Submit transcripts from each of the post-secondary institutions attended. Transcripts must be forwarded by the institutions directly to the Office of Admissions.
3. Obtain a Physical Therapy Program Admission Packet from the School of Physical Therapy.
4. Complete and return the program admission forms, including transcripts and course descriptions, to the School of Physical Therapy no later than November 18, 1991.

#### Entering Ohio University Freshmen

The professional education program in Physical Therapy is built upon a liberal arts and sciences foundation. A recommended route for completing these prerequisites is through enrollment in the College of Arts and Sciences' Psychology or Zoology/Prephysical Therapy Program. For additional information please contact the dean's office in the College of Arts and Sciences.

### Selection Procedure

The two year program of study begins in June of each year. Application materials must be submitted to the Office of the School of Physical Therapy no later than November 18, 1991, to be considered for admission.

A. Completed student folders will be reviewed by the Physical Therapy Admissions Committee. To be a candidate for the program the applicant must meet the following criteria:

1. Fulfillment of the general requirements for admission to Ohio University.
2. Completion of prerequisites for the Physical Therapy program. These prerequisites are:
 

Anatomy*	6 qtr. hrs.
Chemistry*	12 qtr. hrs.
English Composition	9-10 qtr. hrs.
Exercise Physiology*	6 qtr. hrs.

Kinesiology	4 qtr. hrs.
Neuroscience/Neuroanatomy	2-3 qtr. hrs.
Philosophy**	6 qtr. hrs.
Physics*	8 qtr. hrs.
Physiology*	6 qtr. hrs.
Psychology***	12-15 qtr. hrs.
Sociology	4 qtr. hrs.
Statistics	5 qtr. hrs.
Zoology*	8 qtr. hrs.

\*Should include a laboratory component.

\*\*Philosophy: should include courses in ethics and logic.

\*\*\*Psychology: should include courses in childhood and abnormal psychology.

3. Completion of all requirements for the baccalaureate degree for Ohio University with the exception of the courses required in the professional physical therapy program. (See University General Education Requirements in the Graduation Requirements section of this catalog.)
  4. Attainment of a minimum g.p.a. of 2.8 for all undergraduate work.
- B. Based on information received, the Admissions Committee will screen applicants and then schedule group interviews with selected applicants as a next level of screening. No more than 34 students will be admitted yearly. Applicants will be notified of acceptance by mid-April.
- C. If the Master of Physical Therapy proposal is approved by the Ohio Board of Regents, applicants to the new program must:
1. hold a baccalaureate degree in zoology, psychology, or a major other than physical therapy.
  2. complete all requirements listed in A.1. and A.2. above.
  3. attain a minimum g.p.a. of 3.0 for all undergraduate work
  4. submit scores from the Graduate Record Examination (GRE).

## Program of Study (125 qtr. hours)

The following is a listing of the courses required in the two calendar year professional education program in physical therapy.

PT 410 Human Anatomy and Dissection (4 lec, 8 lab)	7
PT 425 Principles of Clinical Teaching (4 lec)	4
PT 426 Research Seminar (4 lec)	4
PT 431 Professional Role Issues (4 lec)	4
PT 441* Community Practice Problems I (2 lec, 3 lab)	3
PT 442* Community Practice Problems II (2 lec, 3 lab)	3
PT 443* Community Practice Problems III (2 lec, 3 lab)	3
PT 444* Community Practice Problems IV (2 lec, 3 lab)	3
PT 446* Community Practice Problems V (2 lec, 3 lab)	3
PT 447** Clinical Practicum I	5
PT 448** Clinical Practicum II	7
PT 449** Clinical Practicum III	12
PT 450 Intro to Clinical Problems (4 lec, 6 lab)	4
PT 451 Musculoskeletal Problems I (3 lec, 4 lab)	5
PT 452 Musculoskeletal Problems II (3 lec, 4 lab)	5
PT 453 Musculoskeletal Problems III	4
PT 454 Respiratory Problems (2 lec, 4 lab)	4
PT 455 Neuromuscular Problems I (3 lec, 4 lab)	5
PT 456 Neuromuscular Problems II (3 lec, 4 lab)	5
PT 457 Cardiovascular Problems (2 lec, 4 lab)	4
PT 458 Topics in Cardiovascular Eval.	3
PT 459 General Medical Surgical Problems (2 lec, 4 lab)	4
PT 460 Crit. Anal. of PT Eval. Proc.	3
PT 490 Independent Study (1-4 lec)	4
PT 493 Neuromuscular Problems III (3 lec, 4 lab)	5
Elective*** (Tier III)	4
Electives***	8

(The Physical Therapy Program is subject to revision/additions as new courses are approved.)

\*Community practice problems courses will entail periodic local travel away from the main campus. Students are *responsible* for transportation to clinical sites.

\*\*The clinical practica are full 40-hour-week experiences. Clinical Practicum I is 4 weeks in length. Clinical Practicum II is 6 weeks in length. Clinical Practicum III is 10 weeks in length. Students are responsible for providing their own transportation to and from clinical sites and for housing and other living expenses.

\*\*\*The student will choose electives in consultation with the faculty advisor.

# Honors Tutorial College

Margaret F. Cohn, *Dean*

The Honors Tutorial College offers 24 challenging degree programs to qualified students admitted at the beginning of the freshman or sophomore year. The Honors Tutorial College also administers the Departmental Honors Program, a thesis option for eligible undergraduates in other colleges at Ohio University.

## THE TUTORIAL PROGRAM

This unique academic program is modeled on the educational method used in British universities, notably Oxford and Cambridge. Although other colleges and universities have adopted particular features of this model, Ohio University is the only institution in the United States that has a degree-granting college incorporating all the essential features of the traditional tutorial system. The Honors Tutorial College enrolls approximately 200 full-time undergraduate students.

## Goals of the Program

- To provide the high-ability student with a flexible and personalized alternative at the undergraduate level.
- To provide an intensified learning experience by:
  - Replacing lecture by tutorial in the student's major.
  - Permitting each student to progress at an optimum pace.
  - Promoting advanced competency in a specific field.
  - Allowing the student to earn a bachelor's degree in three years.
  - Encouraging the student to develop critical perceptions as well as creative and intellectual independence.
  - Acquainting the student with accomplished scholars through the one-to-one tutorial relationship.
  - Fostering a living-learning environment in a special residence hall.
- To provide the preprofessional student with practical training through internships and other individually arranged educational experiences.

## A One-to-One Learning Experience

The most important aspect of the program is the tutorial, required in the student's major, occasionally available in a secondary field. During this weekly conference the student and tutor discuss previously assigned topics, posing new questions and problems for later discussion. Since the student is expected to participate actively during tutorials, independent preparation occupies much of the student's time between sessions.

The rapport established in this one-to-one relationship enhances learning and facilitates rapid progress in the field. It also ensures that the student's ability and specific interests are reflected in the content of tutorials.

## Honors Tutorial Majors

Through formal arrangements with various academic departments in the University, the Honors Tutorial College offers majors in:

Botany	Journalism
Chemistry	Management
Dance	Mathematics
Economics	Philosophy
Engineering Physics	Physics and Astronomy
English	Political Science
Film	Psychology
French	Sociology
Geography	Spanish
Hearing and Speech Sciences	Telecommunications
History	Theater
Interpersonal Communication	Zoology and Biomedical Sciences

*Only these disciplines are available as tutorial majors at the present time. Certification in Secondary Education may be added to the tutorial degree in another major by a limited number of students.*

Participating departments have well-established research facilities, and the tutors are full-time faculty with many years of professional experience.

Tutorial students preparing for careers in law may major in any of the above areas or choose special prelaw programs in economics, history, philosophy, and political science.

Detailed descriptions of departmental programs in tutorial studies can be obtained by contacting the director of the Honors Tutorial College, 35 Park Place, Ohio University, Athens OH 45701-2979 (614-593-2723).

## Individualized Program

To ensure both supervised structure and independent choice, each participating department has a director of studies who coordinates the programs of tutorial students in that major. Combining departmental requirements and the student's personal interests, the director helps to develop a curriculum that best meets the needs of the individual student.

While preparation for advanced training in a particular discipline remains the overall objective of the tutorial program, pursuit of other intellectual or creative inclinations finds encouragement and helpful advice. The student's curriculum is guided by an advisor or master tutor throughout the three- or four-year program.

Major requirements generally include a sequence of tutorials, collateral studies, lectures, seminars, comprehensive examinations, and, in some areas, laboratory, field, or

studio work. In many departments, the tutorial student also completes a research thesis or creative project under the direction of a faculty member.

## Examinations

In most tutorial majors, students take comprehensive examinations. When the tutor judges that the student has thoroughly mastered all relevant material, a comprehensive examination is given to test competency, either in the field as a whole or in a selected portion of it. Like the tutorial, these examinations require, on an expanded scale, that the student assimilate information and consider it again in the light of other knowledge and experience.

Since the tutorial system works best when the faculty-student relationship is free from the pressure of formal examinations, departmental committees prepare and grade comprehensive examinations. However, the tutor may, at any time, use a variety of methods to test the student's grasp of ideas and to assess his or her progress. This process not only intensifies the student's participation in tutorials but also forms the basis for the tutor's quarterly evaluation, a report notifying both the college and the student that satisfactory progress is being made or that specific problems require attention.

## Degree Requirements

To earn a bachelor's degree in the Honors Tutorial College, the student must fulfill all academic requirements established by the department for his or her particular tutorial major and have at least a 3.0 overall grade-point average. The student must also satisfy the University's English composition requirement. To facilitate measurable competency in a given field, the Honors Tutorial College does not mandate a fixed hour or residency requirement or a specific course distribution (except as required by individual departments). A student in this college earning a second bachelor's degree in another college at Ohio University also must complete all the requirements established by the second college.

Academic departments participating in the Honors Tutorial College set their own tutorial degree requirements, including required courses outside the major field. In this respect, the tutorial curriculum is much like that of a graduate program. Each department offering a tutorial program has developed a course of study designed to give the student mastery of the field at an advanced undergraduate level. When the department is satisfied that all tutorial requirements have been met, the student may graduate from Ohio University with a degree in that major.

## A Bachelor's Degree in Three Years

Many of the tutorial programs enable a student to graduate in three years, although additional time may be desirable in a variety of circumstances. Graduates of the Honors Tutorial College frequently find their level of preparation comparable to that of students entering the second year of graduate work.

Degrees conferred by the college include the Bachelor of Fine Arts in (major), Bachelor of Science in Journalism, Bachelor of Science in Communication in (major), Bachelor of Arts in (major), Bachelor of Science in (major), and Bachelor of Business Administration in (major).

## Placement of Graduates

The Honors Tutorial College has earned a reputation for graduate and professional school placement. To date, most students wishing to continue their education have been placed in master's programs, doctoral programs, law schools, and medical schools. Others have readily found

employment in fields related to their undergraduate work, particularly in journalism, theater, hearing and speech, management, and marketing. A number of graduates in the humanities have found teaching or research jobs. With a relatively small enrollment in this degree program, faculty tutors and college administrators guide students personally toward their graduate interests and career opportunities.

## Housing Privileges

Students admitted to the Honors Tutorial College are invited to live in Hoover House, an intensive-study dormitory on the New South Green. A computer laboratory in this residence hall is available for all students in the college. Students may use their own computers or those in the laboratory. Located among upperclass residence halls, Hoover House provides an environment conducive to mature self-discipline and intellectual dialogue. While most tutorial students choose this unique living-learning opportunity, alternative University housing is available for those who prefer it.

## Selectivity and Admission

Tutorial studies are available only to the well-qualified, highly motivated student who wants to pursue one of the 24 academic areas listed above. Students apply for admission to specific disciplines.

With the approval of participating departments, the college admits a limited number of majors each year. Although most eligible students enter the program at the freshman level, others apply after completing a year of undergraduate work. Transfer and re-entry students are also frequently admitted.

The college requires excellent academic credentials. Standardized test scores, high school records, and recommendations from teachers or counselors all help to determine an applicant's eligibility. Students must fill out the standard Ohio University application form and submit it to the Honors Tutorial College by February 1 of the year they wish to enter. Once the applicant's file is complete, an admissions interview may be arranged by contacting the college office. Applications for early admission are treated on a rolling basis until that date. Unsuccessful candidates may reapply, provided that they attain at least a 3.4 g.p.a. after two or more quarters in another college.

## DEPARTMENTAL HONORS PROGRAM

An outstanding undergraduate student at Ohio University may choose to earn departmental honors by presenting a thesis. Depending upon the major field, the thesis may be either an expository or creative piece of original work, the result of supervised research, or a collection of artistic endeavors. A departmental thesis advisor helps in the decision of an appropriate project and guides the student toward completion of the thesis.

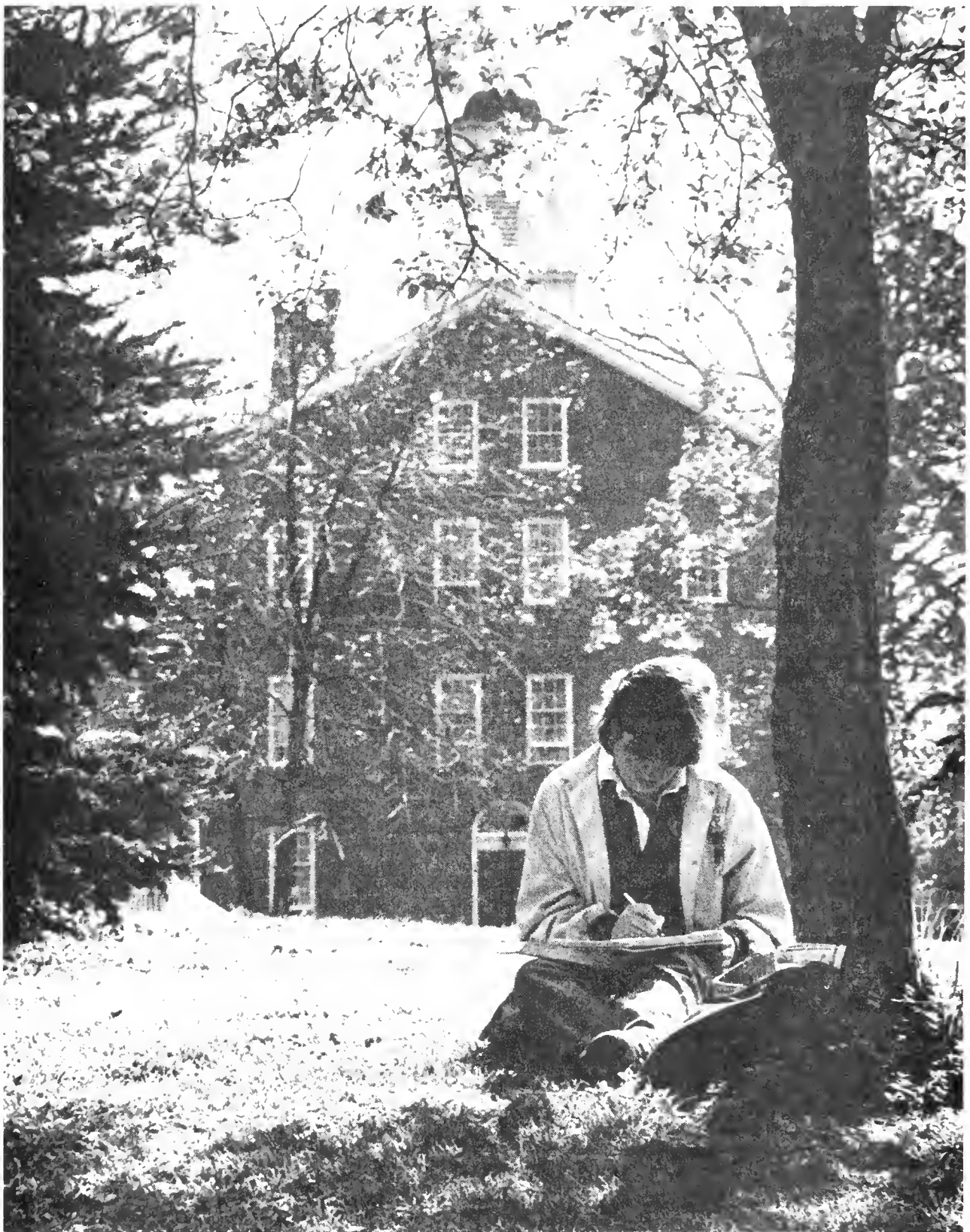
Before enrolling for departmental honors, the student should discuss the project with the faculty member who will serve as his or her thesis advisor. Departments determine eligibility for the program and suitability of the proposed thesis. After the proposal is approved by the department, the student should apply for departmental honors at the Honors Tutorial College (35 Park Place).

A student choosing this option is responsible for informing the Honors Tutorial College of the nature of the project at least a month prior to graduation to insure that the proper recognition can be given at Commencement and inscribed on the degree. When applying for graduation, the student should be sure to indicate on the form that he or she is completing an honors project.



Following departmental approval of the completed thesis, the student submits it to the Honors Tutorial College for final confirmation. To graduate with departmental honors, the student must have satisfied the honors criteria re-

quired by the major department (such as a particular grade point average). Since the thesis option necessitates some advance planning, the interested student would do well to begin planning this program during the junior year.





# Center for International Studies

Felix V. Gagliano, *Vice Provost for International Programs*

Ohio University established the Center for International Studies in 1964 to provide students and citizens of the United States and other countries with opportunities to obtain knowledge about peoples and cultures of the world, particularly Africa, Asia, and Latin America, and about related international concerns. This endeavor is founded on the broad belief that an appreciation of different values and institutions increases understanding between peoples, enriches the lives of individuals, and assists all in forming opinions on issues which affect the growing world community.

The center coordinates teaching, research, and publications activities through programs related to three world regions — the African Studies Program, the Latin American Studies Program, the Southeast Asian Studies Program — and comparative and international topics. These programs assist in the development of courses and the expansion of library materials. They support visiting lecturers, film series, seminars, and colloquia throughout the year. More than 100 scholarly papers relating to Africa, Southeast Asia, and Latin America have appeared in the center's publication program. An East Asia Committee also functions with some modest support from the center.

## MAJOR IN INTERNATIONAL STUDIES

Through the College of Arts and Sciences, the center offers an undergraduate major in international studies. The program of study leading to the Bachelor of Arts in International Studies aims to provide a small number of students with the tools to become highly proficient in understanding global affairs through (1) the study of the culture, geography, ecology, history, society, economy, and politics of a world region outside the United States (either Asia, Africa, Europe, or Latin America); (2) acquiring a high level of proficiency in a second language; (3) direct experience of another culture through study abroad experiences; (4) development of a framework for a cross cultural perspective on critical global issues; and (5) development of a global perspective as a background for an international career in government, business, education, service, or communication.

## STUDY ABROAD

Students majoring in international studies are required to spend a minimum of one quarter in a study abroad experience, determined in consultation with the student's advisor and planned as an integral part of the program. The primary goals of the experience are to increase language competency and to expose the student to the culture of the world region upon which he or she is concentrating. In rare cases, the study abroad experience may be waived due to prior experience, financial exigencies, or the like. In some cases an internship with an international organization in which the second language is used may be substituted for

study abroad. Waiving or substitution of the requirement may be done only by the Bachelor of Arts in International Studies (BAIS) Committee upon petition to the student's advisor. Credit for the study abroad experience will be awarded according to the procedures outlined in the Ohio University *Study Abroad Handbook*.

## LANGUAGE REQUIREMENT

To graduate with a Bachelor of Arts in international studies, a student must demonstrate proficiency in reading, writing, and speaking a language related to the area of concentration. The aim of this requirement is to produce students who are functional in a second language. Beginning in fall 1992, proficiency tests will be administered through the Department of Linguistics or the Department of Modern Languages, depending upon the language studied. To gain proficiency, the student may use any or all of the following: coursework at Ohio University, intensive summer language institutes, or study abroad in a country where the language is spoken. Until proficiency testing is in place, students must take three advanced-level language courses (beyond 213) to satisfy this requirement.

## ARTS AND SCIENCES REQUIREMENTS

Students majoring in international studies also must meet College of Arts and Sciences requirements in the following areas: foreign language, humanities, social sciences, and natural sciences. Courses used to satisfy general Arts and Sciences requirements for the A.B. degree cannot be used to meet major requirements or vice versa. Arts and Sciences also requires the completion of ten hours of English which, except for the freshman composition requirement and methods courses, will apply to the humanities area requirement. The table below lists the areas and required hours. Further information on the Arts and Sciences area requirements is included in the College of Arts and Sciences section of this catalog.

1. Foreign Language	Through 213
The language selected must be appropriate to the world region chosen as part of the major requirement.	
2. Humanities	18 hours
Five hours at freshman level must be taken in addition to the 18 hours.	
3. Social Sciences	18 hours
4. Natural Sciences	18 hours

## DEGREE REQUIREMENTS

Requirements for the A.B. in international studies consists of a minimum of 52 hours chosen from the International Studies Core and Area Studies Options, as follows: International Studies Core—a minimum of six cross cultural/international studies courses, one in international relations, two in comparative studies, and one in ecology. Area Studies Options—a minimum of 27 hours of coursework relating to one of the following world regions: Africa, Asia, Latin American, or Europe.

### International Studies Core (25 hrs)

1. International Relations (5 hrs)  
Required course: POLS 250 Int'l Relations (5) (2S)
2. Comparative Studies  
Select two courses from each category (16 hrs)
  - a. ANTH 101 Cultural Anthro (5) (2T)  
ECON 370 Comp. Economic Systems (4)  
GEOG 121 Human Geog (4) (2S)  
INCO 410 Cross Cultural Communication (4)  
POLS 230 Comparative Politics (4) (2S)
  - b. ANTH 350 Economic Anthropology (4)  
GEOG 131 World Regional: Third World (4) (2T)  
HIST 131 Third World History (4) (2T)  
POLS 340 Politics of Developing Areas (4) (2T)
3. Ecology  
Select one course from the following (4 hrs)  
ANTH 378 Human Ecology (4)  
BOT 103 Plants and People (4) (2A)  
GEOG 201 Environmental Geography (4)

### Area Studies Options (27 hrs)

Area studies options are offered in relation to the following countries: Africa, Asia, Latin America, or Europe. For each option, students must select 27 hours, with a minimum of 12 from the area core.

#### Africa (27 hrs)

**Area Core** (minimum of 12 hrs; no more than 8 from any one department.)

ECON 455	African Economic Development (4)
GEOG 351	Geography of Africa (4)
HIST 341A-C	Early Trad., Modern Africa (4) (2T)
INST 113*	Modern Africa (4) (2T)
POLS 441	Government and Politics of Africa (5)

\*Required course

#### Electives

AAS 315	Literature of West Africa (4)
AAS 316	Literature of South Africa (4)
AH 332	West African Art (4)
AH 333	Central African Art (4)
ANTH 381	Cultures of Sub-Saharan Africa (4)
BOT 369A	Integrative Tropical Botany (4)
BOT 369C	Tropical Plant Ecology (4)
BOT 369D	Agricultural Plant Ecology (4)
EDIC 425A	Educational and Development in Africa (4)
ENG 470	Special Studies (when topic is African lit)
HIST 336A-B	North Africa (4)
HIST 338	History of West Africa (4)
HIST 338A	History of East Africa (4)
HIST 342A-B	South Africa (4)
HIST 343	Revolutions in Southern Africa (4)
PHIL 372	Islam (4) (2T)
PHIL 478	African Philosophy (5)
POLS 463	The U.S. and Africa (5)
POLS 490C	The OAU and Africa (5)
T308 495K	Arts/Race: U.S./South Africa

#### Asia (27 hrs)

**Area Core** (minimum of 12 hrs; no more than 8 from any one department.)

ANTH 385	Cultures of SE Asia (4)
ECON 473	Economics of SE Asia (4)
ENG 306A-C	Oriental Literature (5) (2T)
GEOG 338	Geography of SE Asia (4)
HIST 345A-C	Southeast Asian History (4) (2T)
HIST 346A-B	China (4) (2T)
INST 103*	Modern Asia (5) (2T)
PHIL 475	Chinese Philosophy (5)
POLS 447A-B	Government and Politics of SE Asia (4)

\*Required course

#### Electives

AH 330	Arts of the Orient (4) (2T)
ANTH 386	Problems in SE Asian Anthropology (4)
BOT 369A	Integrative Tropical Botany (4)
BOT 369C	Tropical Plant Ecology (4)
BOT 369D	Agricultural Plant Ecology (4)
HIST 344A	History of Malay World (4)
HIST 344B	History of Burma and Thailand (4)
HIST 344C	History of Vietnam (4)
HIST 348A-B	Japan (4)
HUM 117	Books of the Orient (4)
INDO 340	Traditional Literature of SE Asia (3)
INDO 345	Modern Literature of SE Asia (3)
INST 350	Focus on Malaysia (5)
INST 490	Tun Razak Seminar (5)
PHIL 370	Hinduism (4) (2T)
PHIL 371	Buddhism (4) (2T)
PHIL 372	Islam (4) (2T)
POLS 445	Politics of Japan (4)
POLS 446	Politics of China (4)

#### Latin America (27 hours)

**Area Core** (minimum of 12 hrs; no more than 8 from any one department.)

ANTH 366	Cultures of the Americas (4)
ECON 474	Economics of Latin America (4)
GEOG 335	Geography of Latin America (4)
HIST 323A-C	Latin American History (4) (2T)
INST 121*	Survey of Latin American (4) (2T)
POLS 435	Revolution in Latin America (4)
SOC 408	Latin American Society (4)
SPAN 443	Spanish-American Literature (4)

\*Required course

#### Electives

AH 331	Pre-Columbian Art (4)
ANTH 368	Prehistory of Latin America (4)
BOT 369A	Integrative Tropical Botany (4)
BOT 369C	Tropical Plant Ecology (4)
BOT 369D	Agricultural Plant Ecology (4)
HIST 325	History of U.S.-Latin American Relations (4)
HIST 426	Dictatorships in Latin America (4)
POLS 434	Government and Politics of Latin America (4)
POLS 479	Latin American Political Thought (4)
SPAN 349	Spanish American Civ. & Culture (4) (2T)
SPAN 350	Mexican Civilization and Culture (4)

#### Europe (27 hrs)

**Area Core** (minimum of 12 hrs; no more than 8 from any one department.)

ECON 353	European Economic History (4)
FR 356	Intro to French Literature (4)
GEOG 340	West European Geography (4)
GER 356	Intro to German Literature (4)
HIST 362A-B	Europe 1814-1914 (4)
HIST 364A	Europe Between the Wars (3)
HIST 364B	Contemporary Europe (4)
HIST 382C	Soviet Union (4)
PHIL 458	Contemporary European Philosophy (5)
POLS 331	Politics in Western Europe (4) (2S)
POLS 333	Politics in the Soviet Union (4)
RUS 356	Intro to Russian Literature (4)

## Electives

ART 327	Art of the 19th Century (4)
ART 328	Modern Art (4)
BOT 425	Plant Ecology (5)
FLT 338A-B	German Literature in Translation (4)
FLT 339B	Soviet Literature in English (4)
FR 348-9	French Civilization and Culture (4)
FR 355	Introduction to French Literature (4)
GER 235	German Drama on Stage (2-4)
GER 348-9	German Civilization and Culture (4)
GER 356	Introduction to German Literature (4)
HIST 265A	Hitler and His Nazis (4)
HIST 356A-C	Renaissance and Reformation (4)
HIST 358A-C	Early Modern Europe (4)
HIST 366A-B	France (4)
HIST 368A-B	Germany (4)
HIST 372A-C	History of the Balkans (4)
HIST 374A	Balance of Power (4)
HIST 374B-C	History of International Diplomacy (4)
HIST 375	World War I (5)
HIST 382A	History of Russia (4)
HIST 382B	Russia: Road to Revolution (4)
HIST 483	Russian and Soviet History (4)
PHIL 444	Philosophy of Marxism (5)
POLS 432	Policy Making in the U.S.S.R. (5)
POLS 433	Soviet Foreign Policy (5)
POLS 438	Government and Politics of Germany (5)
POLS 439	Government and Politics of France (4)
ZOOL 275	Animal Ecology (4)

## INTERNATIONAL STUDIES UNDERGRADUATE CERTIFICATE

The center offers certificates in African, Asian, and Latin American studies to benefit students who wish to add an international dimension to their majors (without majoring in international studies), as well as to those interested in international careers or planning graduate work in area studies. The certificate is awarded upon graduation from Ohio University, and the proper notification is placed on the student's official transcript upon completion of the requirements.

The requirements for the Latin American Certificate are: (1) six courses relating to Latin America; (2) a study of a language relevant to the student's program through the intermediate level; and (3) a grade-point average of 2.5 in all courses taken toward the certificate. The requirements for the Asian or African certificate are: (1) 8 courses which may be chosen in either of these two options: *Option A* — Three of the courses must be in an African or Asian language and the other five must relate to Africa or Asia; *Option B* — The eight courses must relate to Africa or Asia but with no language requirement; (2) a grade-point average of 2.5 in all courses taken toward the certificate.

Students seeking the certificate must register with the undergraduate certificate advisor in their area studies program.

# Office of Lifelong Learning

Joseph B. Tucker, *Associate Vice Provost*

Andrew Chonko, *Continuing Education, Conferences, and Workshops*

Michael Mark, *Adult Learning Services*

Richard Moffitt, *Independent Study*

The Office of Lifelong Learning is the administrative umbrella under which the following offices operate: Continuing Education, Conferences, and Workshops, Adult Learning Services, and Independent Study. Its purpose is to provide lifelong learning opportunities beyond the regular channels of the University by using the resources of the University in nontraditional ways.

Classes, independent study courses, workshops, and seminars are planned as requests and need indicate. Both credit and noncredit programs are offered and may or may not lead to a degree. Students seeking admission to a degree program must be admitted through regular Ohio University procedures. Participants in designated noncredit courses may be awarded continuing education units (CEUs).

Programs of special interest to audiences beyond the traditional credit-seeking student include the Senior Citizens Program and the Informal Community Learners Program. The Senior Citizens Program began fall quarter, 1973, and provides opportunity for Ohio residents who are 60 years of age or older to participate in many University courses at no cost to the participant.

The Informal Community Learners Program (ICLP) allows any resident of the Ohio University community who is not currently enrolled for credit to be admitted on a space-available basis to any undergraduate class offered by the University. University credit cannot be earned through ICLP or the Senior Citizens Program.

## ADULT LEARNING SERVICES

The Office of Adult Learning Services is responsible for the development of new programs and services for the adult learner. This office provides information and counseling for the person interested in the assessment of college-level learning from prior experiences and attempts to link learners to various resources to meet their educational needs.

The **External Student Program** is available to students who wish to earn either the associate or bachelor's degree primarily through the various Independent Study options or in combination with residential work. Services offered through this program include evaluation of previous college-level work and degree planning.

The **Summer Institute for Adult Learners** provides the opportunity for adult students to return to campus for one week of intensified study. Students earn college credit during this week and are able to interact with other adults who are pursuing degree work. This program earned the Creative and Innovative Award of Merit for an Administrative Program by the North American Association of Summer Sessions in 1990.

The **Experiential Learning Program** is designed to award credit for college-level learning acquired through work and life experiences. Adult learners enroll in a four-hour credit course titled "Portfolio Development." This is an approved college course which assists the adult learner in documenting acquired learning. Up to one full year of college credit may be awarded toward a four-year degree.

For more information, contact:

Director, Adult Learning Services  
309 Tupper Hall  
Ohio University  
Athens OH 45701-2979

## CONTINUING EDUCATION, CONFERENCES, AND WORKSHOPS

The Office of Continuing Education, Conferences, and Workshops offers a wide range of credit and noncredit classes and programs designed to serve the lifelong learning needs of nontraditional students. The office makes available a coordinator who serves as a consultant to anyone wanting assistance in planning a course, workshop, conference, or similar educational venture.

In addition, the office plans and develops its own programs and courses to meet the educational needs of the public at the local, state, and national levels. Its administrative services include program design, budgeting, program promotion, requisitioning of supplies and materials, registration, arranging food service and housing, reserving facilities and equipment, and program evaluation.

The standard University tuition fee is charged for credit coursework while each noncredit program has a fee determined by direct costs. Formal admission to the University is necessary only for credit courses.

More than 500 workshops, seminars, conferences, and courses are conducted on the Athens campus each year.

Including such diverse programs as the Conference on Inference, Austrian-American Studies Institute, Elderhostel, Ohio School of Banking, band camps, annual publications and language workshops for high school students, summer short courses for teachers, and boys' and girls' sports clinics.

Inquiries are welcome from any individual, business, or special-interest group interested in using University expertise and/or facilities. Programs may be conducted either on campus or at off-campus sites such as industrial plants, public schools, or libraries.

**Continuing Education** provides evening and weekend credit classes at the graduate and undergraduate levels for the nontraditional student; certificate programs in real estate, management, and other career development areas; and experimental classes offered to determine their viability in a degree-oriented program. The Community program offers each quarter a wide array of educational and avocational classes designed for area residents. In-service training for varied interest groups including business and industry, social service agencies, and professional and civic groups, among others, is also provided.

**Workshops** assists various schools and departments within the University to plan, organize, and conduct short, intensive workshops which feature practical hands-on experiences and presuppose active participation on the part of enrollees.

**Conferences** serves as the University's contact with outside organizations who contract for use of the University's staff or facilities for educational programs and avocational activities. Such groups include the American Motorcyclist Association, Boy Scouts, the Rainbow Girls Assembly, Ohio AFL-CIO, and the Ohio Education Association.

For further information, contact:

Director, Continuing Education,  
Conferences, and Workshops  
Memorial Auditorium/Lower Level  
Ohio University  
Athens OH 45701-2979

## INDEPENDENT STUDY

The Independent Study Program provides a number of flexible ways by which a person may pursue college-level work and earn college credit. In some cases degrees may be earned without some of the limitations imposed by the traditional university structure. Independent Study allows an individual to learn at the time, place, and rate suited to his or her own particular needs.

**Independent Study Courses** provide a highly structured method of independent study involving a tutorial relationship with a faculty member who guides the student's learning and monitors his or her progress. A detailed study guide

prepared by the professor responsible for the course is sent to each student. This publication contains an overview of the course and directs the student's learning as the textbooks, cassette audiotapes, videotapes, and other educational materials, devices, and techniques are used. The student submits written assignments which are evaluated and commented on by the professor. Supervised examinations at the student's location are generally required.

**Independent Study Projects** can sometimes be arranged in undergraduate courses not currently available as independent study courses. These arrangements are made on an individual basis and are contingent upon the approval of the department in which the course is offered and the availability of a qualified faculty member willing to direct the project. This is an unstructured form of independent study which can be used most effectively by the experienced student. The student and the faculty member agree upon the conditions which must be fulfilled for credit to be awarded. The work may include a variety of readings, papers, projects, and examinations.

**Course Credit by Examination** represents the least structured method of obtaining college credit through the Independent Study Program. The student receives at the time of enrollment a brief syllabus which describes the nature of the course, the textbooks and other materials needed, as well as the nature of the supervised examination. The student prepares for the examination without intermediate assistance from a faculty member. Letter grades and credit are awarded for performance on the examination.

**The College Level Examination Program (CLEP)** is especially useful for the adult who has had no previous college experience but whose work or life experience may be the basis for college credit. It is also useful for the beginning college student who has had an enriched high school experience. The program is sponsored by the College Entrance Examination Board, and the Independent Study Office serves as an open test center administering examinations by appointment on Saturday of the third week of each month. Subject to approval by the appropriate department in each case, the University will allow credit for satisfactory performance on the CLEP subject-matter examinations, provided that the examinations are taken prior to formal enrollment at Ohio University. The University does not award any credit for scores achieved on the CLEP General Examinations. Detailed information is available in a special publication which can be supplied on request.

For further information, contact:

Director, Independent Study  
302 Tupper Hall  
Ohio University  
Athens OH 45701-2979

## Regional Campuses

Ohio University has five campuses, other than the Athens campus, located in Belmont County, Chillicothe, Ironton, Lancaster, and Zanesville, and a resident credit center at Portsmouth.

The primary objective of the regional campuses is to offer a broad program at the freshman and sophomore levels. Each location has a full two-year curriculum in the arts and sciences, business administration, and education, with selected courses in such specialized fields as engineering and fine arts. Students are eligible to receive the Associate in Arts or the Associate in Science degree after completing an approved two-year program of study. Available at some locations are specialized two-year programs leading to the

Associate in Applied Business or Associate in Applied Science, designed as preparation for specific career opportunities in the immediate area. In selected areas, students pursue upper-level and graduate courses.

The admission policies for the regional campuses are the same as those of the Athens campus. Ohio high school graduating seniors who can commute from home to one of the regional campuses will be admitted as regular full-time or special part-time students. This decision is based on the high school transcript, Scholastic Aptitude Test, or the American College Test (preferred). The regional campuses have no residence halls.





# University College

Samuel Crawl, *Dean*

William L. Allen, *Associate Dean*

Richard L. Harvey, *Assistant Dean*

Richard K. Brackin, *Assistant to the Dean*

Laura Cross Chapman, Mark Graham,

Lora Munsell, Shirley A. Williams, *Counselors*

## THE COLLEGE

University College is designed primarily to meet the needs of: (1) freshman students who are exploring options leading to their educational and career goals; (2) students fulfilling University General Education Requirements; (3) special students; (4) associate degree students on the Athens campus; and (5) students seeking degrees through the Bachelor of Specialized Studies Program or the Bachelor of Criminal Justice Program. The Criminal Justice Program is available to students who have earned associate degrees in related disciplines. The college staff manages orientation/advisement programs, such as Precollege, which assist students in reviewing their interests, planning academic programs, and adjusting to University life.

## UNIVERSITY COLLEGE PROGRAMS

### ACADEMIC ADVISING AND COUNSELING

No single activity of University College requires more time or is given a higher priority than advising and counseling. It is the responsibility of University College to inform students about the existing academic options and assist them in coming to decisions about how they can best use the University to facilitate their growth and development.

Entering students able to identify a preferred area of study are admitted directly to the degree college of their choice and are assigned faculty advisors representing their major department. Exploratory students, or those who wish to investigate several academic options before settling into a major, are admitted to University College. An exploratory student is assigned both an academic advisor who is a full-time professor on the teaching faculty and a counselor from the University College staff to whom the student may turn for information and advice about choosing a major program of study and for an understanding of University regulations. Associate degree, specialized studies, and special students also are assigned University College counselors who help them plan an appropriate program. In addition, upperclass students in all colleges may seek out

counseling in University College when their questions touch on University-wide issues or University College programs.

Students in the University College are encouraged at entry to follow the requirements of degree programs. Students with tentative majors should refer to those requirements as outlined elsewhere in this catalog. In addition, the University College expects its students to be thoroughly familiar with the Guidelines and General Information section of this catalog.

All freshman students, regardless of intended major or college of entry, are required to meet the University General Education Requirements for freshmen. This includes proficiency in English composition and in basic quantitative skills.

To assist students in meeting these University General Education Requirements, a series of placement examinations in reading, writing, and mathematics is required of all entering students. These examinations are administered each quarter as an integral part of the freshman orientation program.

During the freshman orientation program each quarter, with the placement test results as an aid, the University College staff will assist each student in selecting appropriate first-quarter courses as well as the appropriate entry level for each course. A full-time schedule covered by the regular fee is between 11 and 20 quarter hours, with 16 hours being the average.

### DECLARING A MAJOR

Beginning with freshmen entering in 1988, University College exploratory students are required to either declare a major and transfer to another college by the time they earn 90 credit hours, or file a Statement of Academic Intent in the University College office which outlines their plans for qualifying to enter a major over the next two quarters. This policy has been instituted because all majors in the University require students to complete residency hours and many have up to two years of direct study. Exploratory students still enrolled in University College at 130 credit

hours will not be permitted to register for classes until they have been accepted in a degree-granting program. Exceptions to this rule may be approved only by the dean of University College.

## **GENERAL EDUCATION**

In 1979 the faculty of Ohio University adopted a comprehensive General Education Program required of all baccalaureate degree students. University College is responsible for coordinating the various facets of this program including providing administrative support for the English Composition Advisory Council and the University Academic Advising Council. The goal of these activities is to ensure that all undergraduate students participate in a common curriculum as well as fulfilling the specific requirements of their individual colleges and major fields of study.

## **PRECOLLEGE FRESHMAN PROGRAM**

Each year during July and August, University College conducts an academic Precollege Orientation Program designed to acquaint freshmen and their parents with the programs of the University. Precollege results in a completed schedule and registration for each student. Students meet with undergraduate student counselors, University College professional counselors, and faculty advisors for assistance in planning their academic programs. Abbreviated orientation and advising programs are also held following Precollege and prior to the fall, winter, spring, and summer quarters for freshman, transferring, re-enrolling, relocating, and special students.

## **FRESHMAN INTERDISCIPLINARY COURSE**

Each year University College sponsors a special interdisciplinary course for freshmen, entitled "The University Experience" (UC 115). The course is designed to help first-quarter freshmen adjust to the new experiences encountered in university life. UC 115 is intended to meet the special needs of those students who are particularly undecided about their educational and career objectives and who may have doubts about their preparedness for college life. Topics covered include university organization and resources, study skills, time management, degree requirements, values clarification, goal setting, academic major selection, and career planning.

## **PREPROFESSIONAL PROGRAMS**

Students intending to pursue majors in the colleges of Business Administration, Communication, or Engineering and Technology must meet direct-entry requirements for admission into those colleges. Students who do not meet the requirements for Engineering and Technology are admitted to University College as preprofessional students.

The colleges of Business Administration and Communication do not have preprofessional programs. Students in University College who are seeking entry into those colleges must meet specific requirements as outlined by the respective colleges. For details on direct-entry requirements of the colleges of Business Administration, Communication, and Engineering and Technology, consult the Colleges and Curricula section of this catalog.

## **UNIVERSITY PROFESSOR PROGRAM**

To acknowledge outstanding undergraduate teaching, students of Ohio University each year select six University Professors. University Professors are full-time faculty who have demonstrated noteworthy teaching ability and an effective insight into educational processes.

Upon selection by the student University Professor Selection Committee and final appointment by the provost, each professor is granted a release from part of his or her teaching duties and \$2,000 for educational support or professional development. The professor uses this opportunity to teach at least two classes of his or her own choosing.

At the present time this program is limited to the Athens campus.

The University Professor Selection Committee consists of student representatives from each undergraduate college.

The selection procedure has three parts:

1. Campus wide nominations by ballot of outstanding full-time professors. This occurs early in the academic year.
2. Selection of the top nominees as a result of committee examination and class visitation during winter quarter.
3. Official appointment by the provost after consultation with the respective department chairs and deans.

## **ACCESS AND SUCCESS PROGRAM**

Students transferring from another college/university or relocating from one of Ohio University's regional campuses to the Athens campus can now receive assistance with this transition through the newly established Access and Success Program. Funded by the Ohio Board of Regents, the program provides general information about the Athens campus, its resources and procedures, and access to a peer mentor/support group. The group helps unite incoming transfer and relocated students with a group of their peers who have also recently come to the Athens campus and would like to share their experiences.

In conjunction with the other University College staff, an orientation program is offered each quarter for incoming students, and a designated "Relocate Day" is offered during spring quarter. Relocate Day is sponsored by the Office of Admissions and the Access and Success Program. It gives relocating students an opportunity to obtain academic advising, learn about campus procedures, take a campus tour, and preregister for summer and fall quarter classes. The program coordinator can be contacted at the Academic Advancement Center, Room 101, Alden Library.

## **PROJECT CAP ADJUSTMENT PROGRAM**

Since 1979 Ohio University and the U.S. Department of Education\* have supported the College Adjustment Program (CAP) at the Academic Advancement Center. Serving more than 300 students each year, Project CAP has a strong record of enabling qualified students to adjust to the academic demands of college within an atmosphere of encouragement and guidance.

### **Goals and Objectives**

The goal of Project CAP is to retain and graduate participating students from Ohio University. All activities and services included in CAP focus on that goal. To further long-term academic success, classwork and individual consultation help to develop basic skills. In addition, careful planning of course selections promotes academic success. For short-term academic support, CAP provides private tutoring free of charge. For nonacademic concerns, such as financial, personal, and interpersonal problems, and career and major choice, students may consult a staff counselor.

### **Qualifications**

Acceptance into Project CAP is based on the following criteria:

- 1) Educational need and potential, based on ACT or SAT scores as well as rank in high school class.
- 2) First generation college student, meaning neither parent has earned a four-year college degree.\*\*

- 3) Low income status, determined by 150% of federal poverty levels. Eligibility for financial aid is a strong indicator.\*\*
- 4) U.S. citizenship or permanent residency.
- 5) Less than 45 credit hours earned (freshman status) at time of application.
- 6) Timely submission of application materials.

Eligibility for CAP is enhanced if a handicapping condition (including a learning disability) is verified by the Ohio University Office of Affirmative Action.

\*Funded by a Student Support Services grant of the TRIO Programs, United States Department of Education.

\*\*A small number of students may be accepted who qualify based on either criterion 2 or 3, but not both.

## Features

Project CAP assumes that participating students are serious about the pursuit of a college education. CAP expects them to strive for excellence, as demonstrated through class attendance, completion of academic work, consultation with instructors, use of provided services, and maintenance of a positive and responsible attitude.

In turn, Project CAP assists students through the following features:

- guaranteed enrollment in the study skills and reading improvement classes.
- unlimited individualized assistance on basic skill improvement.
- free, private tutoring in any enrolled course.
- special CAP advisement for course selection.
- informal residence hall visitations by student advisors.
- midterm performance evaluation in all classes.
- personal, vocational, and financial counseling.
- special University retention review.

New students admitted to Ohio University who are identified as potentially eligible for CAP will receive information on the program prior to the University's orientation period.

Students may decide to leave Project CAP during any quarter. They are encouraged to discuss their plans with the CAP counselor, however, to consider various aspects of that decision. Most students choose to remain in CAP for one to two years. Participation may continue until the senior year.

Questions may be directed to the Academic Advancement Center, Alden Library.

## DEGREES OFFERED

### BACHELOR'S DEGREES

#### Bachelor of Specialized Studies

The Bachelor of Specialized Studies Program provides an opportunity for undergraduate students at Ohio University to design their own education. The student with high motivation, an exceptional background, or an unusual combination of talents and interests may find this degree program useful in attaining his or her goals. The program is geared toward four categories of students: (1) the student who is uncertain about career goals and wishes to utilize University resources for career exploration; (2) the student who desires to obtain an education motivated only by self-interest with no apparent intent to utilize the education for career purposes; (3) the student who knows what it is he or she wants to become but wishes to pursue a nontraditional approach in achieving that goal; and (4) the student who wants to combine the available University resources to create an entirely unique field of study not currently available in the curriculum offerings.

Students seeking to enter graduate school or one of the

established professions may find that following the patterns suggested by the various disciplines may be more useful to them simply because the traditional degrees have greater visibility in the world and will more readily suggest the nature of their academic accomplishments to others. The Bachelor of Specialized Studies degree program is an acknowledgement that the existing degree programs, as varied as they are at Ohio University, cannot satisfy the legitimate educational requirements of all students. The Specialized Studies Program provides the means by which individual students may, with the help of a University College counselor or a student services counselor on a regional campus, determine the structure of their degree programs.

To enter the Specialized Studies Program, the student must complete an application form available in the University College Office or at one of the regional campuses and have the completed application reviewed by a member of the University College staff. Final admission to the Specialized Studies Program is granted only upon review of the application by the Bachelor of Specialized Studies Review Sub-Committee composed of students, faculty, and administrators. The Review Sub-Committee meets once each quarter to consider applications.

The student must meet the following criteria before submitting an application to the Specialized Studies Program for consideration:

1. Current enrollment with regular student status;
2. Achievement of sophomore rank;
3. An overall 2.0 accumulative grade-point average.

A student must meet the following requirements to graduate in the Specialized Studies Program:

1. Earn 192 credit hours, at least 90 of which must be in junior- or senior-level courses (courses with catalog numbers at the 300 level or above as shown in the *Undergraduate Catalog*).

2. Earn a minimum of a 2.0 accumulative grade-point average based on the 192 credit hours.

3. Complete no fewer than 45 credit hours of Ohio University credit (degree residence requirement) after being admitted to the Specialized Studies Program, excluding any courses registered for prior to admission to the program. This includes any transfer, transient, Course Credit by Examination, Independent Study coursework, etc., for which the initial registration was completed prior to seeking admission to the Specialized Studies Program.

4. Complete a minimum of 45 credit hours in a self-selected area of concentration which has been approved by the Bachelor of Specialized Studies Review Sub-Committee. The 45-hour concentration area is designed by the student and may include either work from one department or a combination of coursework from two or more related departments. The courses included in the concentration area become course requirements for graduation subject to change only by prior permission from a University College counselor and in some cases the Bachelor of Specialized Studies Review Sub-Committee. The prospective Specialized studies student is advised to work closely with a faculty or resource person in the field of interest to elicit suggestions for constructing an appropriate program of study.

5. Complete the University General Education Requirements.

6. Satisfactorily complete the minimum of 48 credit hours of Ohio University coursework to satisfy the University residence requirement.

Applications may be submitted at any time during the quarter except in the case of seniors. Seniors must submit completed applications no later than the end of the fifth week of the quarter to have current credit hours included as part of the total 45 credits needed after admission to the Specialized Studies Program (subject to the exclusions listed in item 3 above, etc.). The deadlines\* to submit

applications and have current credit hours included as part of the degree residence requirement are as follows:

Fall Quarter 1991-92

**Deadline** — October 18, 1991

Winter Quarter 1991-92

**Deadline** — February 7, 1992

Spring Quarter 1991-92

**Deadline** — May 1, 1992

Summer Quarter 1991-92

**Deadline** — July 17, 1992

\*Proposals must be submitted, with an official transcript or an up-to-date check sheet, to a University College counselor at least 7 calendar days prior to the listed deadlines.

## Bachelor of Criminal Justice

The upper-division Criminal Justice Program is designed specifically for students who have previously completed an associate degree program in an area related to criminal justice, such as law enforcement, corrections technology, or police administration. Students who hold such degrees from technical or community colleges or from a regional campus of Ohio University are able to enter directly into the Criminal Justice Program and complete the baccalaureate degree in two years.

This program offers students with technical education backgrounds the opportunity to broaden their exposure to liberal higher education, while acquiring the necessary specialization to qualify for careers in such fields as parole and probation, forensic science, adult and juvenile corrections, and police administration. Criminal justice students also may prepare for law school or for further study in graduate or professional schools.

The flexible, interdisciplinary curriculum is composed of a broad range of courses from the social and behavioral sciences, humanities, natural sciences, and professional disciplines, all of which make a contribution to the complex field of criminal justice. Students also have the opportunity to design individualized programs of study to a significant degree with elective courses which relate to their career goals.

To enter the Criminal Justice Program, a student must complete an application form and submit a college transcript showing that he or she has completed an associate degree in an appropriate field. Upon entrance, the student will be assigned a faculty advisor who will assist in designing a program of study.

Degree requirements are as follows:

1. A total of 96 credit hours, beyond a minimum of 96 hours earned in an acceptable associate degree program.
2. Of the 96 hours in the criminal justice curriculum, 45 hours must be at the 300 level or above.
3. Within the total 192 hours, students must complete the General Education Requirements (Tier I, II, III). Some courses taken to complete the associate degree may also fulfill these requirements.
4. All students must complete no fewer than 12 courses from within the following core areas: **Area I: Basic skills** (Choose three courses, one each from A, B, and C) — (A) ENG 308J, ENG 305J; MGT 325J; (B) INCO 215, 404, 410; (C) CS 120, MATH 250B, POLS 482, PSY 121, SOC 350. **Area II: Social and political systems** (Choose three courses, one from A and two from B) — (A) AAS 254, 340, 360, 370, SOC 329; (B) SOC 362, 366, POLS 409, SW 390. **Area III: Human behavior** (Choose three courses, no more than two from A or B. Do not take both SOC 210 and PSY 336) — (A) SW 380, AAS 440, 442, PSY 233, PSY 336 or SOC 210, SOC 211; (B) PSY 332, 337, SOC 361, 363, ZOOL 390. **Area IV: Organizational skills and management** (Choose three courses, no more than two from A or B) — (A) ACCT 201, HRM 420, MGT 300, POLS 412; (B) BUSL 255, MGT 340, 345, 428, SOC 430.

5. Earn a minimum of a 2.0 accumulative grade-point average based on the 192 credit hours.

The remaining hours beyond the core requirement will be chosen, in consultation with a faculty advisor, on the basis of the student's educational goals and career interests. For qualified students without prior professional experience in criminal justice, internship and field experience programs may be arranged.

**NOTE:** Courses taken to complete the associate degree cannot additionally fulfill core requirements for the B.C.J. degree.

## ASSOCIATE DEGREES

University College offers many programs of study leading to the associate degree for students who wish to obtain a two-year degree. The residence requirement for associate degrees is less than that for baccalaureate degrees and is detailed in the Graduation Requirements section of this catalog. Application for the degree is made at the Office of Student Records at the time announced for all degree candidates and must be accompanied by an \$8 fee. Associate degree candidates are encouraged to participate in the annual commencement exercises with all other degree candidates.

## General Requirements

The minimum requirement for an associate degree is the completion of 96 credits with a 2.0 accumulative average at graduation. A maximum of 24 credits earned through the Experiential Learning Program may be applied to any associate degree. Additional requirements for each degree follow this section.

Information about all associate degree programs is available through either the regional campuses or University College. Students who plan to pursue an associate degree program must consult with the director of the specific program and/or with a member of the counseling staff of the regional campus or University College.

The student's academic records must be in University College at the time he or she applies for and receives the associate degree. If a student plans to apply for and receive both an associate degree and a baccalaureate degree simultaneously, or earn a baccalaureate degree after the associate degree, the student's academic records will reside in the college responsible for the baccalaureate degree. It is the student's responsibility to ensure that he or she is enrolled in the appropriate college.

## Application Toward Bachelor's Degree

Credit earned while enrolled in an Ohio University associate degree program will be applied toward an Ohio University baccalaureate degree program. The shift from an associate to a baccalaureate degree program may involve spending additional time in completing the four-year requirements for two reasons: (1) prerequisite courses may not have been completed and (2) technical courses will apply only as elective courses in most four-year degree programs.

If pursuing an associate degree program is intended as the first step toward a baccalaureate degree, the student should consult the Ohio University General Education Requirements appropriate for his or her quarter of entry. These requirements are part of the program of study for all baccalaureate students.

Students moving into baccalaureate study from an associate degree program may need more than 96 additional hours to complete the requirements for their new major, especially if their associate degree was in a technology. The additional required work stems from the fundamental dif-

ferences between technical and baccalaureate programs of study.

## Associate Degree

### After a Baccalaureate Degree

A student who has already earned a baccalaureate degree may pursue an Associate in Applied Business degree or Associate in Applied Science degree if the two-year degree is in a field other than that in which the baccalaureate degree was earned. It is also permissible for a student to pursue an Associate in Individualized Studies degree after earning a baccalaureate degree depending on the rationale for doing so and the desired area of concentration. The Associate in Arts or the Associate in Science degree is not normally an appropriate degree objective for one who has already earned a baccalaureate degree.

### Associate in Applied Business Degree

Available in accounting technology (Lancaster), business management technology (Chillicothe and Lancaster), computer science technology (Lancaster), office management technology (Lancaster), and office administration technology (Chillicothe). See details under the specific program.

### Associate in Applied Science Degree

Available in aviation technology (Athens), computer science technology (Lancaster), electronics technology (Lancaster), human services technology (Chillicothe), industrial technology with a design or manufacturing emphasis (Lancaster), law enforcement technology (Chillicothe), nursing (Zanesville), radio-television with either technology or performance production emphasis (Zanesville), and security/safety technology (Chillicothe). See details under specific programs.

### Associate in Arts/Associate in Science Degrees

Available on all campuses. Each degree requires a minimum of 96 credit hours.

The A.A. degree may emphasize either arts/humanities or social sciences. For the arts/humanities emphasis, the A.A. degree must include 30 credits of arts/humanities, 15 credits of social sciences, and 15 credits of natural sciences/applied sciences/quantitative skills. For the social sciences emphasis, the A.A. degree must include 30 credits of social sciences with 15 credits in each of the other two areas. The A.S. degree must include 30 credits of natural sciences/applied sciences/quantitative skills, 15 credits of social sciences, and 15 credits of arts/humanities.

Students are required to complete the Freshman English and Quantitative Skills components of Tier I of the University General Education Requirement as part of the required areas mentioned above. The remaining 36 credits may be of the student's own choosing. A maximum of 24 credits earned through the Experiential Learning Program may be applied to the A.A. or A.S. degree. At least 30 of the student's total credits earned toward the A.A. or A.S. must be Ohio University credits.

Students are not permitted to earn both the A.A. and A.S. degrees. In addition, students who have previously earned the A.I.S. degree are not permitted to earn either the A.A. or A.S. degree.

Following are the three areas from which a student may select courses for the A.A. or A.S. degree. Students must work with regional campus student service directors or University College counselors on the Athens campus to ensure that all requirements are fulfilled.

The only exception to these requirements is the specific curriculum in home economics (Athens campus only) which leads to the A.A. degree in child development. This curriculum is described below, under its specific title.

## Arts and Humanities

AAS 110, 150, 210, 211, 250, 310, 350, 355, 356

Art

Art History

Classical Archaeology

Classical Languages (Latin, Greek)

Classical Languages in English

Comparative Arts

Dance

English (except 150)

Film

Foreign Languages (Arabic, Chinese, French, German, Indonesian/Malaysian, Italian, Japanese, Russian, Spanish, Swahili)

Foreign Literature in Translation

HIST 121, 122, 123, 314A F, 328, 329A C, 330, 331, 351, 352,

353A-B, 354, 356A-C, 370, 389

Humanities

INCO 101, 103, 104, 215, 220

Music

Philosophy (except 120)

Theater

Women's Studies

## Natural Science, Applied Science, and Quantitative Skills

Accounting 201, 202

ANTH 201

Astronomy

Botany

Chemistry

Computer Science

Engineering (except ET 134)

GEOG 101, 201, 260, 302, 303, 411

Geological Sciences

HEFN 128

HLTH 202

HSS 108

Management Information Systems

Mathematics (except 101, 102)

Microbiology

PHIL 120

Physical Science

Physics

PSY 121, 226, 241, 312, 314

Quantitative Business Analysis

Zoological and Biomedical Sciences

## Social Science

Afro-American Studies (except those courses listed in Arts and Humanities)

Anthropology (except 201)

BUSL 255, 370

Counselor Education (EDCE) 410, 440

Economics

Geography (except 101, 201, 260, 302, 303, 411)

History (except those courses listed in Arts and Humanities)

HECF 160, 360, 370, 371

INST 103, 113, 121

INCO 205, 206, 234, 245, 351, 352, 353

JOUR 105, 311

Linguistics

MGT 200

Political Science

Psychology (except 121, 226, 241, 312, 314)

Social Work

Sociology

TCOM 105, 170

## Associate in Individualized Studies Degree

Available on the Athens, Chillicothe, Lancaster, and Zanesville campuses. A student who wishes to pursue a two-year program of study in a field other than those available through one of the other associate degree options may design his or her own program of study to meet particular goals through the self-designed Associate in Individualized Studies Degree Program.

To be admitted to the program, the student must complete an application, available in the University College office or at one of the regional campuses, and schedule an interview with a member of the counseling staff of the regional campus or University College. Final admission to the program is granted only upon review of the application by the Associate Degree Sub-Committee. **NOTE:** Students who have previously earned an associate degree are not permitted to earn the A.I.S. degree.

Although there are no specific course or academic area requirements, the application must outline the student's intended course of study, and it must include a proposed area of concentration.

The student must indicate two resource (advisory) faculty and/or staff members who have been consulted in the preparation of his or her program, one of whom must be from the student's area of concentration.

To submit an application for admission to the program, the student must currently be an enrolled *regular* student. Requirements for the Associate in Individualized Studies degree are:

1. 96 quarter credits of work
2. 2.0 accumulative grade-point average
3. No fewer than 30 credits of work to be taken after admission to the program
4. Completion of Tier I freshman level requirements in English composition and quantitative skills.
5. Completion of an approved area of concentration of at least 30 credits of work.

Although applications may be submitted at any time during the quarter, the same deadlines established for the Bachelor of Specialized Studies Program must be met to have current hours included as part of the 30 credits needed after admission to the Associate in Individualized Studies Degree Program.

A maximum of 24 credits earned through the Experiential Learning Program may be applied to the A.I.S. degree.

## PROGRAMS OF STUDY

### ACCOUNTING TECHNOLOGY (A.A.B.)

Ohio University-Lancaster offers a two-year program for accounting technicians leading to the Associate in Applied Business degree. Requirements for the degree include accounting technology career courses, related basic courses, and general education courses. This program prepares the student to enter junior accountant positions in business, industry, or government.

#### Freshman

ATCH 103	..... 3	ATCH 104	..... 3	ATCH 105	..... 3
ECON 103	..... 4	MATH 113	..... 5	ATCH 203	..... 4
ENG 151	..... 5	ECON 104	..... 4	CS 120	..... 5
OMT 121	..... 3	PSY 101	..... 5	INCO 103	..... 4
	<u>15</u>		<u>17</u>		<u>16</u>

#### Sophomore

ATCH 225	..... 4	ATCH 204	..... 4	ATCH 206	..... 4
ATCH 106	..... 3	ATCH 205	..... 4	ATCH 209	..... 4
ATCH 241	..... 4	BMT 110	..... 4	OMT 262	..... 4
MKT 101	..... 4	BUSL 255	..... 4	Elective	..... 6
	<u>15</u>		<u>16</u>		<u>18</u>

Majors must complete Tier I (quantitative and freshman English) requirements.

### AVIATION TECHNOLOGY (A.A.S.)

The University College and the Department of Aviation offer an Associate in Applied Science degree in aviation technology. Completion of this program will prepare

students for career opportunities in commercial aviation as F.A.A. certified pilots and air crew members as well as positions in related aerospace industries. Interested students should consult with the chair of the Aviation Department, at the airport.

#### Freshman

AVN 110	..... 4	AVN 240	..... 4	AVN 310	..... 4
IT 220	..... 3	AVN 320	..... 2	AVN 340	..... 4
ENG 151	..... 5	ECON 103	..... 4	ECON 104	..... 4
MATH 115	..... 4	PSY 101	..... 5	GEOG 101	..... 5
	<u>16</u>		<u>15</u>		<u>17</u>

#### Sophomore

AVN 343	..... 4	AVN 400	..... 4	AVN 425	..... 6
AVN 350	..... 4	INCO 103	..... 4	AVN 440	..... 4
GEOG 302	..... 5	GEOG 304	..... 4	GEOG 405	..... 4
Elective	..... 4	POLS 101	..... 4	Elective	..... 4
	<u>17</u>		<u>16</u>		<u>18</u>

A minimum of 96 quarter hours is required for completion.

Majors must complete Tier I (quantitative and freshman English) requirements. Course offerings may vary from quarter to quarter; therefore the sequence may be adjusted to fulfill the requirements.

### BUSINESS MANAGEMENT TECHNOLOGY (A.A.B.)

Ohio University-Chillicothe and Ohio University-Lancaster offer a two-year program of study in business management leading to the Associate in Applied Business degree. Requirements for the degree include business management technology courses, related basic courses, and general education courses. This program prepares the student to assume paraprofessional positions in business, industry, and government.

#### Freshman

ATCH 103	..... 3	ATCH 104	..... 3	ATCH 105	..... 3
BMT 110	..... 4	BMT 150	..... 3	BMT**	..... 3-4
BMT 120*	..... 4	ECON 103*	..... 4	ECON 104	..... 4
BMT 140	..... 4	ENG 151	..... 5	OAT 262	..... 4
	<u>15</u>		<u>15</u>	PSY 101	..... 5
					<u>19-20</u>

#### Sophomore

BMT 210	..... 4	BMT 200	..... 4	BMT 270	..... 3
BMT 220	..... 4	BMT 230	..... 3	BMT 280	..... 4
BMT 250	..... 3	BMT 275	..... 4	BMT 285	..... 3
BUSL 255	..... 4	POLS 101	..... 4	BMT 288	..... 4
INCO 103	..... 4	Tier I Math	..... 4-5	OAT 267	..... 3
	<u>19</u>		<u>19-20</u>		<u>17</u>

A minimum of 96 hours is required for completion.

\*MATH 101 or equivalent is a prerequisite.

\*\*Elective

A real estate option is available through the Business Management Technology Program by substitution of the following courses:

REAL 101 Principles and Practices	..... 4
REAL 103 Real Estate Law	..... 4
REAL 102 Brokerage	..... 4
REAL 201 Real Estate Appraising I	..... 4
REAL 204 Real Estate Finance	..... 4
REAL 221 Real Estate Special Topics	..... 4

Courses not required for the real estate option are:

BMT 150, 220, 250, 280, and elective; and OAT 262, 267.

Majors must complete Tier I (quantitative and freshman English) requirements.

### CHILD DEVELOPMENT (A.A.)

University College and the School of Home Economics offer an Associate in Arts degree in child development. The program meets the requirements for prekindergarten associate teacher certification in Ohio. Interested students



should consult with the director of home economics for additional information, including employment opportunities and continuation into the baccalaureate degree program.

### General Education Requirements

Tier I: Quantitative and Freshman English

Tier II: 30 hours from an approved list of courses in the following areas:

- Applied Science and Technology
- Humanities and Fine Arts
- Natural Sciences and Mathematics
- Social Sciences
- Third World Cultures

Students are required to take at least four hours in four of the five distribution areas.

### Technical Requirements

EDEL 321 Children's Literature .....	3
EDM 480A Intro to Educational Media .....	2
EDSP 270 Classroom Mgt. of Child. with Behavior Prob. ....	3
EDSP 271 Intro to Educ. of Except. Children and Youth .....	3
HECF 160 Intro to Child Development .....	4
HECF 299 Soph. Practicum .....	5
HECF 361 Prin. of Preschool Guidance .....	4
HECF 363 Creative Exper. with Preschool Children .....	4
HECF 364 Premath and Science with Young Children .....	4
HECF 371 Family Development .....	3
HECF 365 Infant Education .....	4
HECF 366 Practicum in Early Childhood Education .....	6
HEFN 128 Introduction to Nutrition .....	4
HLTH 227 First Aid .....	3
HSS 108 Intro to Speech Disorders .....	5
MUS 262 Mus. in Early Childhood .....	3

Student must have a minimum of 96 hours for completion of the associate degree.

### COMPUTER SCIENCE TECHNOLOGY (A.A.B/A.A.S.)

Ohio University-Lancaster offers a two-year program leading to the associate degree in computer science technology. There are two options available — applied business or applied science. Interested students should consult with the director of Computer Science Technology for additional information, including employment opportunities and continuation into the baccalaureate degree program.

#### Required General Education Courses

BUSL 255 Law and Society .....	4
ENG 151 Fresh. Comp. ....	5
INCO 103 Pub. Spkg. ....	4
MATH 250B .....	4
PHIL 120 Principles of Reasoning .....	4
PSY 101 Gen. Psych. ....	5
SOC 101 Intro to Sociology .....	5

#### Technical Requirements

CTCH 125 Intro to Business Data Processing .....	4
CTCH 135 Basic Programming I .....	5
CTCH 223A COBOL Programming I .....	5
CTCH 238 Assembler Programming .....	5
CTCH 280 Operating Sys. ....	4
CTCH 290 Studies in Computer Science .....	1-5

#### Business Option

ACCT 201 Financial Acct. ....	4
ACCT 202 Managerial Acct. ....	4
CTCH 223B COBOL Programming II .....	5
CTCH 224 Project in Application Programming .....	5
CTCH 291A Systems Analysis I .....	4
CTCH 291B Systems Analysis II .....	4
CTCH 235 Basic Programming II .....	5

CTCH 285 Database Management .....	5
ECON 103 Prin. of Microeconomics .....	4
MATH 163A Intro to Calc. ....	4
QBA 201 Intro to Bus. Stat. ....	4

#### Science Option

CTCH 230 Computer Programming I .....	5
CTCH 231 Computer Programming II .....	5
CTCH 235 Basic Programming II .....	5
CTCH 250 FORTRAN .....	4
CTCH Electives .....	5
MATH 263A Analytic Geo. and Calc. ....	5
MATH 263B Analytic Geo. and Calc. ....	5
MATH 263C Analytic Geo. and Calc. ....	5
Nat. Sci. Electives .....	8

Majors must complete Tier I (Quantitative and freshman English) requirements.

### ELECTRONICS TECHNOLOGY (A.A.S.)

Ohio University-Lancaster offers a two-year program for electronics technicians leading to the Associate in Applied Science degree. Requirements for the degree include electronics technology career courses, related basic courses, of general education courses. This program prepares the student for positions in production or service industries, assisting the engineer, or working as part of an engineering team to design, test, install, or maintain electronics and computer systems.

Freshman					
ETCH 110 .....	5	ETCH 111 .....	5	ETCH 112 .....	6
IT 101 .....	3	Elective .....	4	ETCH 120 .....	6
IT 115 .....	3	MATH 115 .....	4	INCO 103 .....	4
MATH 113 .....	5	PSY 101 .....	5	MATH 163A or 263A .....	4
	16		18		20

Sophomore					
ETCH 220 .....	5	BA 101 or ECON 103 ....	4	ENG 151 .....	5
ETCH 236A .....	6	ETCH 221 .....	4	ETCH 260 .....	4
PHYS 201 .....	4	ETCH 236B .....	6	ETCH 288 .....	4
Elective .....	1-3	ETCH 289 .....	3		
		PHYS 202 .....	4		
	16-18		18		16

A minimum of 96 hours is required for completion.

Majors must complete Tier I (quantitative and freshman English) requirements.

### HUMAN SERVICES TECHNOLOGY (A.A.S.)

Ohio University-Chillicothe offers a two-year program leading to an Associate in Applied Science degree in human services technology. The program prepares students for employment in the fields of mental health, social services, child care, corrections, and other human service related areas.

Freshman					
INCO 104 .....	2	ENG 151 .....	5	HST 125 .....	4
HST 102 .....	3	HST 290 .....	3-4	HST 170 .....	4
HST 110 .....	3	POLS 306 or ap- proved POLS		PSY 332 .....	4
HST 290 .....	3-4	substitute .....	4	SOC 101 .....	5
PSY 101 .....	5	ZOOL 101 or 103 ..	5		
	16-17		17-18		17

Sophomore					
HST 150 .....	3	HST 151 .....	4	HST 200 .....	3
HST 171 .....	3	HST 220 .....	2	HST 250 .....	2
HST 210 .....	2	HST 222 .....	1	HST 255 .....	1
HST 211 .....	1	PSY 333 or		HST 152 .....	4

HST 275 ..... 3	273 ..... 4	Soc Sci Elect... 4-5
Elective (or MATH Tier I		ZOOL 382 ..... 3
101 if needed) 3-4	Quantitative . 4-5	
15-16	15-16	17-18

A minimum of 96 hours is required for completion.

Majors must complete Tier I (quantitative and freshman English) requirements.

## INDUSTRIAL TECHNOLOGY (A.A.S.)

Ohio University-Lancaster offers a two-year program for industrial technicians leading to the Associate in Applied Science degree. Students may choose an area of specialization by selecting either the design or manufacturing option. A total of 73-75 hours of courses is common to both options.

The design option, requiring an additional 29 hours, prepares the student for various design-related positions, such as a design technician, product design, engineering support, or technical sales.

The manufacturing option requires an additional 23-25 hours and students are prepared for positions in production industries that may include technician, quality control specialist, process control specialist, maintenance supervisor, foreman, and supervisor.

Graduates may also choose to finish the four-year industrial technology degree in Athens.

Descriptions of the design technology (DTCH) and manufacturing technology (MTCH) courses are listed alphabetically in the Courses of Instruction section under Design Technology and Manufacturing Technology.

### Design Option

Freshman			
CHEM 121 ..... 4	CHEM 122 ..... 4	DTCH 150 ..... 3	
IT 101 ..... 3	INCO 103 ..... 4	IT 121 ..... 3	
IT 115 ..... 4	IT 102 ..... 3	MATH 163A ..... 4	
MATH 113 ..... 5	IT 216 ..... 4	MATH 290 ..... 3	
	MATH 115 ..... 4	PHYS 201 ..... 4	
16	19	17	
Sophomore			
DTCH 200 ..... 4	DTCH 210 ..... 4	DTCH 220 ..... 3	
ETCH 110 ..... 5	DTCH 230 ..... 4	DTCH 250 ..... 4	
MTCH 220 ..... 3	DTCH 240 ..... 4	PSY 101 ..... 5	
PHYS 202 ..... 4	ENG 151 ..... 5	Hum./soc.	
Tech. elec. .... 3		sci. elec. .... 3-5	
19	17	15-17	

A minimum of 96 hours is required for completion.

### Manufacturing Option

Freshman			
CHEM 121 ..... 4	CHEM 122 ..... 4	IT 102 ..... 3	
IT 101 ..... 3	ENG 151 ..... 5	MATH 163A ..... 4	
IT 115 ..... 4	IT 216 ..... 4	MTCH 261 ..... 3	
MATH 113 ..... 5	MATH 115 ..... 4	MTCH 290 ..... 3	
		PHYS 201 ..... 4	
16	17	17	
Sophomore			
ETCH 110 ..... 5	INCO 103 ..... 4	BA 101 ..... 4	
IT 260 ..... 3	MTCH 263 ..... 3	MTCH 264 ..... 3	
MTCH 220 ..... 3	MTCH 221 ..... 3	PSY 101 ..... 5	
PHYS 202 ..... 4	MTCH 299 ..... 1-3	Tech. elec. .... 3	
MTCH 262 ..... 3	Hum./soc.		
	sci. elec. .... 3-5		
18	14-18	15	

A minimum of 96 hours is required for completion.

Majors must complete Tier I (quantitative and freshman English) requirements.

## LAW ENFORCEMENT TECHNOLOGY (A.A.S.)

Ohio University-Chillicothe offers a two-year program leading to an Associate in Applied Science degree in law enforcement technology. This program prepares the student for employment in law enforcement by providing academic preparation for the contemporary officer. Career opportunities may be available in such areas as state highway patrol, local and county law enforcement agencies, corrections, juvenile authorities, and as probation officers. Upon completion of this program, interested students may continue in the Bachelor of Criminal Justice Program on the Athens campus. Students may also work toward the Athens-based four-year degree in forensic chemistry. Additional information is available from the Law Enforcement Technology Program director or the director of the Criminal Justice Program.

Freshman			
ENG 151 ..... 5	HLTH 227 ..... 3	HSC 132 ..... 1	
HSC 107 ..... 1	HSC 113 ..... 1	LET 140 ..... 3	
LET 100 ..... 3	INCO 101 ..... 4	LET 150 ..... 3	
LET 110 ..... 3	LET 120 ..... 3	PSY 101 ..... 5	
SOC 101 ..... 5	LET 130 ..... 3	SOC 201 ..... 4	
	POLS 102 ..... 4		
17	18	16	
Sophomore			
ART 191 ..... 4	EDCE 410 ..... 3	HSM 107 ..... 1	
HSM 104 ..... 1	HSM 105 ..... 1	LET 260 ..... 3	
LET 200 ..... 4	LET 230 ..... 3	LET 270 ..... 3	
LET 210 ..... 3	LET 240 ..... 3	LET 280 ..... 3	
LET 220 ..... 3	LET 250 ..... 3	POLS 320 ..... 5	
	SOC 362 ..... 4		
15	17	15	

A minimum of 96 hours is required for completion.

Majors must complete Tier I (quantitative and freshman English) requirements.

## NURSING (A.A.S.)

Ohio University-Zanesville offers a two-year nursing program. A student who completes the program will receive an Associate in Applied Science degree in nursing and will be eligible to write the State Board Examination for Registered Nurse. The program is accredited by the National League for Nursing, and is open to men and women. All nursing courses (labeled NURS) must be completed with a grade of C or better.

Freshman			
CHEM 121 ..... 4	HEFN 128 ..... 4	NURS 103 ..... 7	
NURS 100 ..... 1	NURS 102 ..... 7	MICR 201 ..... 4	
NURS 101 ..... 7	ZOOL 131 ..... 5	PSY 101 ..... 5	
ZOOL 130 ..... 5			
17	16	16	

Upon completion of NURS 104, students must have an accumulative g.p.a. of 2.0 or better in the above courses.

NURS 104.....7 Cr., to be taken during 1st summer session between 1st and 2nd years.

ENG 151 must be taken prior to completion of the program.

Sophomore			
NURS 201 ..... 6	NURS 203 ..... 6	NURS 205 ..... 12	
NURS 202 ..... 6	NURS 204 ..... 6	Elective* ..... 3	
Tier I	SOC 101 ..... 5	NURS 206 ..... 1	
Quantitative . 4-5			
16-17	17	16	

The sequence of the freshman level support courses may not be altered; sophomore level support courses may be altered with permission.

A minimum of 110 hours is required for completion.

\*Recommend: Fine Arts, Humanities, Third World Culture.

Majors must complete all Tier I (quantitative and freshman English) requirements.

## OFFICE ADMINISTRATION TECHNOLOGY (A.A.B.)

The Chillicothe campus of Ohio University offers a two-year program leading to an Associate in Applied Business degree. This program prepares the student to enter top secretarial positions in business, industry, and the professions. The program incorporates the development of managerial skills.

In addition, a one-year certificate program in office administration technology is offered. Completion of this program does not result in an A.A.B. degree in office administration technology.

### Office Administration Technology (Chillicothe)

Freshman			
MATH 101 or Elective	ENG 151	OAT 123	
3 5	3	3	3
OAT 121	OAT 171	OAT 172	
3	3	3	3
OAT 131	OAT 226	PSY 101	
3	3	5	5
OAT 225	Elective	Elective	
3	4	3 4	
OAT 231			
3			
15 17	18	17 18	

Sophomore			
ATCH 103	ATCH 104	OAT 218	
3	3	3	
BUSL 255	MATH Tier I	OAT 267	
4	4 5	3	
INCO 103	OAT 248	OAT 268	
4	3	3	
OAT 258	OAT 262	OAT 298	
3	4	2	
	OAT 221	Elective	
	3	4	
14	16 18	15	

A minimum of 96 hours is required for completion.

Majors must complete all Tier I (quantitative and freshman English) requirements.

### Office Administration Technology (Chillicothe) One-Year Certificate Program

First Quarter	Second Quarter	Third Quarter
OAT 121	OAT 122	INCO 103
3	3	4
OAT 131	OAT 171	OAT 239
3	3	3
OAT 225	OAT 226	OAT 172
3	3	3
OAT 231	OAT 262	OAT 218
3	4	3
Elective	OAT 221	Elective
4	3	4
16	16	17

## OFFICE MANAGEMENT TECHNOLOGY (A.A.B.)

The Lancaster campus of Ohio University offers a two-year program leading to an associate degree in office management technology. This program is designed to train people desiring positions as professionals with knowledge in many phases of business. The program prepares a person to hold a variety of jobs such as administrative assistant, word processing specialist, and office manager.

Freshman			
ENG 151	BA 101	OMT 226	
4	4	3	
OMT 120 or 121	OMT 225	OMT 123	
3	3	3	
OMT 131	OMT 171	OMT 172	
3	3	3	
Tier I Math	Electives	PSY 101	
4	4	5	
15	17	14	

Sophomore			
ATCH 103	ATCH 104	OMT 262	
3	3	4	
BUSL 255	INCO 103	OMT 267	
4	4	3	
CS 120	OMT 221	OMT 293	
5	3	2	
OMT 151	OMT 249	OMT 299	
3	2 5	2 5	
OMT 239	OMT 250	Elective	
3	2	4 5	
18	14-17	15 19	

A minimum of 96 hours is required for completion.

Majors must complete Tier I (quantitative and freshman English) requirements.

## RADIO—TELEVISION (A.A.S.)

The associate degree program in radio television is founded upon the belief that through intensive, individualized instruction, in a hands-on atmosphere, a student can prepare in only two years for a beginning position in the electronic media (radio or TV stations, cable TV or production houses).

Recent high school graduates or older adults, who are not academically prepared to begin their college careers in the Athens telecommunications program, can benefit from the Zanesville program. The Zanesville program presents students with the opportunity to sharpen their skills before relocating to the School of Telecommunications at the Athens campus. Over 90 percent of those students who complete the Zanesville program, and then relocate to Athens, secure a four-year degree. (A 3.0 R-TV g.p.a. is expected for relocation to Athens.)

The Zanesville radio-TV studios feature the latest in multitrack recording, video animation, and computerized editing equipment. The state-of-the-art facilities, broadly-based curriculum, small classes, and internships have proven invaluable for students who want to obtain a full view of the field of electronic media. The department is particularly proud of the fact that during enrollment at O.U.-Zanesville, nearly 75 percent of all students spend time as interns or part-time employees at an area station. Recent O.U.-Zanesville graduates are now working throughout the United States as representatives and engineers.

### Suggested Radio-Television Sequence

Freshman			
ENG 151	CS 120	POLS 101	
5	5	4	
INCO 103	MATH 151 or MATH Elec.	or 102	
4	4	4	
RTV 101	RTV 211	PSY 101	
2	4	5	
UC 115	RTV 290	RTV 122	
2	1	4	
	13	4	
	TCOM 200A	RTV 216	
	4	4	
		RTV 290	
		1	
		18	
		18	
Sophomore			
JOUR 350	JOUR 353	ARTS & HUM	
4	2	Electives	
MGT 200 or ECON 103	RTV 214 or RTV 217	4	
4	2	Elective	
RTV 290	RTV 257	RTV 214 or	
1	4	RTV 217	
TCOM 206	RTV 290	2	
4	1	RTV 290	
TCOM 308	SOC SCI	1	
4	5	TCOM 170	
	Elective	4	
	17	14	
		16	

With approval of advisor, courses need not necessarily be taken in the order listed above.

A minimum of 96 hours is required for completion.

Majors must complete no less than 40 and no more than 48 of the 96 hour total in R-TV, TCOM, and JOUR classes. Students may be required to enroll in additional courses if prerequisites have not been met.

All R-TV majors must maintain a 2.5 R-TV g.p.a. and 2.33 to advance from the first to second year of coursework.

Majors must complete Tier I (quantitative and freshman English) requirements.

## SECURITY/SAFETY TECHNOLOGY (A.A.S.)

Ohio University-Chillicothe offers a two-year degree program leading to an Associate in Applied Science degree in security/safety technology. This program prepares the students for employment in security by providing academic preparation for the contemporary officer. Career opportunities may be available in areas such as corporate, industrial, retail, and government security.

The Security/Safety Technology Program is designed for in-service security officers and preservice men and women interested in careers in security. The goal of this program is to further their knowledge of security so they are better prepared to obtain employment in this area and to help them qualify for promotion.

The security industry is currently one of the fastest growing industries in America. Security officers are now employed (and more will be employed in the future) by resorts, hospitals, airlines, government, retail companies, manufacturers, bus lines, trucking companies, housing authorities, colleges, public school systems, banks, and other industries.

Freshman					
ENG 151 .....	5	INCO 101 .....	4	EDCE 410 .....	3
HLTH 227 .....	3	LET 120 .....	3	LET 260 .....	3
SOC 101 .....	5	LET 130 .....	3	PSY 101 .....	5
SST 101 .....	3	POLS 101 .....	4	SST 120 .....	3
SST 110 .....	3	SOC 362 .....	4	SST 290 .....	3-4
	19		18		17-18
Sophomore					
ATCH 103 .....	3	ATCH 104 .....	3	POLS 102 .....	4
BUSL 255 .....	4	BA 101 .....	4	SST 230 .....	3
LET 200 .....	3	CS 120 .....	5	SST 240 .....	3
SST 201 .....	3	SST 210 .....	3	SST 250 .....	3
		SST 220 .....	3	SST 260 .....	3
	13		18		16

A minimum of 96 hours is required for completion.

Majors must complete all Tier I (quantitative and freshman English) requirements.

## RESERVE OFFICERS TRAINING CORPS

The rationale for reserve officer training stems from a statement by the founders of this nation that we must "provide for the common defense." For young men and women who have the desire and talent to dedicate their time to the service of their country, there are many and varied rewards. Today, when science and technology are so much a part of the national defense, and the defense of this nation is so inextricably involved with world problems, our nation needs talented and well-trained officers in its military services. These services need the best managers, administrators, engineers, and scientists the nation's schools can produce: officers in command with wide ranges of knowledge and skill. The Reserve Officers Training Corps, in agreement with universities and colleges, is designed to produce these types of men and women for the nation.

The Air Force ROTC Program at Ohio University is under the Aerospace Studies Department; the Army ROTC program is under Military Science Program.

ROTC is divided into two phases: the basic course and the advanced course. The University offers a two-year and a four-year program.

**Basic Course Requirements.** In general, any Ohio University student is eligible for enrollment in the basic courses.

**Advanced Course Requirements.** To be eligible for the advanced course a student must meet academic, physical, aptitude, and moral selection criteria; complete either the basic course on campus or the six-week summer camp/field training following the sophomore or junior year; and enlist in the reserve of the appropriate service. Upon graduation, Air Force ROTC cadets receive active duty commissions as second lieutenants. Army ROTC cadets, upon successful completion of the program, are commissioned as second lieutenants in the United States Army, the United States Army Reserve, or the Army National Guard. Students may be discharged from the reserve for reasons of

academic failure, personal hardship, medical disqualification, or inaptitude.

**Scholarships.** One through four-year scholarships are available on a competitive basis for qualified students. These scholarships pay costs of tuition, lab fees, and books. Additionally, recipients receive a tax-free subsistence allowance of \$100 monthly for the period the scholarship is in effect.

**Subsistence Allowance.** All students in the advanced course receive subsistence allowances of \$100 per month.

**Summer Camp/Field Training Allowances.** All travel expenses, board, living quarters, and uniforms are furnished and students are paid while attending summer camp/field training.

**Uniforms and Equipment.** Textbooks, training equipment, and complete uniforms are loaned to all ROTC students without cost.

**Commissions.** A student who successfully completes the ROTC advanced course and the requirements for a baccalaureate degree will be qualified for the tender of a commission as a second lieutenant in the United States Army or the United States Air Force.

**Special Schooling.** The ROTC Program encourages graduate study and may delay a call to active duty for up to four years for students enrolled in graduate-level study. Selected officers, after entrance on active duty, are sent to civilian universities or service technical institutes for graduate work leading to a master's degree or to a doctoral degree in specialized fields.

## Aerospace Studies Program (Air Force ROTC)

The Aerospace Studies Program is designed to develop the attitudes and skills required of professional Air Force officers. Emphasis is on professional education. The goal is to provide to student cadets the background knowledge to become officers in the United States Air Force, while acquiring baccalaureate degrees in fields of their own choosing.

The curriculum during the first two years of the basic "General Military Course" (one credit hour per quarter) focuses on the doctrine, mission, and organization of the United States Air Force. It also includes studies of the development of air power and present concepts within the Air Force. Included are elements of national power, an overview of the Air Force, a study of democracy, and the actions of nations in their search for world peace. Concurrently with these academic subjects the student cadet will participate in leadership activities called "Leadership Lab." These will enable him or her to gain an insight into dynamics of military leadership as well as to become familiar with Air Force customs and courtesies. There is no commitment during the first two years for nonscholarship cadets and it is an excellent way for a student to look at the Air Force as a career. The entire basic unit consists of six quarters of study and is entitled General Military Course or GMC.

The advanced curriculum, appropriately named the "Professional Officer Course" or POC, is specifically designed to prepare the student cadet for active duty as a commissioned officer. The course curriculum in the senior year includes study of defense policy making, the military and professional soldier, strategy, arms control, and military justice. It emphasizes professional responsibilities of Air Force officers within our democratic society and how the Air Force supports national goals. Studies are made of the military leadership and principles of management during the junior year. Through classroom methods of case stud-

ies, guest lecturers, and dialogue, the student cadet experiences a realistic simulation of problems facing officers. The members of the advanced Professional Officer Course develop their leadership skills by working with the freshman and sophomore cadets; they improve their communicative abilities by writing and speaking; and they perform organizational projects similar to those accomplished by active duty Air Force officers. This advanced unit consists of six quarters (three credit hours per quarter) of on-campus study and a summer quarter of field training which is a prerequisite of the course.

Qualified cadets have the additional option of becoming flying officers. Identification for either pilot or navigator training will be made prior to the beginning of the advanced course. Cadets qualified in the pilot category will receive 14 hours of flight instruction and screening to qualify them for entry into USAF flight training after graduation. This instruction will be provided at no cost to the student cadet as part of the Air Force ROTC program. Navigator qualified cadets receive no formal flight instruction until after graduation and commissioning, when they will enter the USAF's Navigation Flying Training Program.

After commissioning, each new officer is assigned to a position within the Air Force structure which best combines his or her academic major and desires with the needs of the Air Force. Past graduates have requested and been assigned to areas of air operations (both flyers and non-flyers); administration; biological, medical, physical, and social sciences; engineering; law; and research and development in aerospace technologies.

### **Military Science Program (Army ROTC)**

The military science program is designed to develop the leadership and management skills required of an officer in the United States Army. The military science curriculum complements the student's normal coursework for a baccalaureate degree and provides a basis for progression toward a commission as an officer in the United States Army. There are two programs available to the student: the traditional four-year program which parallels the normal college program, and the two-year program which permits a student to enter prior to the last two years of college.

During the first two years or basic course, the student takes classes (two credit hours per quarter) in general military subjects including an introduction to the Army ROTC program, leadership, land navigation, survival training, and military campaign studies. These courses provide a basic understanding of the military system, and a background for the second two years of the program. During the first two years there is no requirement for wearing of uniforms, and no military service obligation incurred. Students may be given credit for the basic course in several ways, which qualifies them for continuation in the ROTC program. Students having prior military service, credit for other officer training courses, or currently serving

in the National Guard or Reserves may receive credit for the basic course. Additionally, students may attend a six-week ROTC Basic Camp, Camp Challenge, during the summer between their sophomore and junior years in lieu of the basic course. Attendance at camp is voluntary and incurs no military service.

The second two years or advanced course expands the student's knowledge of military subjects including military justice, tactics, ethics and professionalism, management, training, and current issues affecting the military. In addition to the credit courses, the department conducts a leadership laboratory in which all advanced students take part in planning and conducting adventure-type outdoor training activities. Examples of such activities are rappelling, survival swimming, marksmanship, physical training, backpacking, and land navigation. Advanced course students are required to attend a six-week summer camp between their junior and senior years. All summer camp expenses are paid by the Army including meals, housing, travel, and uniforms. In addition, each cadet is paid approximately \$600 in military pay for camp attendance (this applies to both basic and advanced camps).

The military science department also sponsors several extracurricular clubs or activity groups, organized by the cadets with faculty advisors, such as Pershing Rifles Drill Team, orienteering, Rangers, color guard, rifle team, and Association of the United States Army (AUSA). Cadets may be selected on a voluntary basis for attendance at U.S. Army schools such as Airborne (parachutist) School, Air Assault School, Northern Warfare School, and Ranger School.

During the advanced course the student enters into a contract which obligates him or her to complete the program, accept a commission as an officer, and serve in the U.S. Army, U.S. Army Reserves, or Army National Guard. Upon graduation and commissioning, lieutenants have a variety of assignments and locations (Europe, Far East, and U.S.) in which to complete their military service obligation. Past graduates have been assigned duties in the fields of aviation, material management, communications, administration, and engineering among many other professional fields in the modern Army.

### **MILITARY STUDIES CERTIFICATE**

The certificate is designed to recognize individuals who have pursued academic work in the areas of military leadership and management. The required twenty-eight hours are offered by the departments of Military Science, History, and Political Science.

Admission to the program is available to any freshman enrolled in Military Science 101, or any sophomore who successfully completes Military Science 230. In addition, a Veteran or Reservist/National Guardsman who elects to participate in the ROTC Advanced Program is eligible for admission.

The Military Studies Certification Program is administered by the Professor of Military Science.



## Courses of Instruction





# Courses of Instruction

**CATALOG NUMBERS** — The catalog number indicates the student classification for which the course is primarily intended:

- 001-099 Noncredit courses
- 100-299 Undergraduate general program
- 300-499 Undergraduate advanced or specialized program

Within the College of Arts and Sciences the alphabetical catalog-number suffixes -I and -O generally are not used. Other alphabetical suffixes have specific meanings: -H, honors courses; -J, junior-level composition courses; -T, tutorial courses; -X, study abroad courses.

**CREDIT** — Credit for a course is indicated by the number or numbers in parentheses following the course title. It may be expressed thus: (3), (1-3), or (2 or 3).

A course with one quarter hour of credit (1) is the equivalent of one recitation or two or more laboratory periods per week throughout a quarter.

In a course carrying variable credit, the credit may be expressed (1-4, max 8), indicating that one hour is the minimum and four hours is the maximum amount of credit allowed for the course in one quarter. However, a student may enroll in the course any number of times and for any number of credit hours, within the quarter limit, provided the total registration for the course does not exceed eight hours.

Courses that satisfy one of the University General Education Tier I or Tier II requirements are indicated by a notation on the title line as follows: Tier I courses are marked either (1E) for English composition or (1M) for quantitative skills; Tier II designations are (2A) applied science and technology, (2H) humanities and fine arts, (2N) natural sciences and mathematics, (2S) social sciences, and (2T) Third World cultures.

Courses that satisfy General Education Tier III requirements are grouped under the heading Tier III.

Course prerequisites are indicated at the beginning of the course description, following the abbreviation "Prereq." A student who has any doubts if he or she has fulfilled prerequisites, due to changes in the numbering system over the past several years, should check the course titles and consult with his or her advisor and the office of the dean. A student who completes an advanced course may not subsequently enroll in a prerequisite course for credit.

If a course is offered for other than the normal academic year of fall, winter, and spring quarters, this fact is noted in parentheses after the prerequisite. Such courses are offered only in the quarters specified.

**INSTRUCTORS** — Unless otherwise indicated in italics following the quarter specification in the course description, the course may be taught by any member of the staff of the department. This course listing is verified as of May, 1991.

**FEE** — When a course requires a private instructional fee, the amount is stated in the course description.

**SCHEDULE** — A Schedule of Classes is available each quarter from the Registrar's Office.

**COURSES OF INSTRUCTION** are available in the following areas of study (course codes are in parentheses):

- Accounting** (ACCT)
- Accounting Technology** (ATCH)
- Aerospace Studies** (AST)
- Afro-American Studies** (AAS)
- Anthropology** (ANTH)
- Art** (ART)
- Art History** (AH)
- Aviation** (AVN)
- Botany** (BOT)
- Business Administration** (BA)
- Business Law** (BUSL)
- Business Management Technology** (BMT)
- Chemistry** (CHEM)
- Communication Systems Management** (COMT)
- Comparative Arts** (CA)
- Computer Science** (CS)
- Dance** (DANC)
- Design Technology** (DTCH)
- Economics** (ECON)
- Education**
  - Counselor Education (EDCE)
  - Curriculum and Instruction (EDCI)
  - Economic Education (ECED)
  - Educational Administration (EDAD)
  - Educational Media (EDM)
  - Elementary Education (EDEL)
  - International and Comparative Education (EDIC)
  - Middle School Education (EDMS)
  - Professional Laboratory Experience (EDPL)
  - Secondary Education (EDSE)
  - Special Education (EDSP)
- Electronics Technology** (ETCH)
- Engineering, Chemical** (CHE)
- Engineering, Civil** (CE)
- Engineering, Electrical and Computer** (EE)
- Engineering, Industrial and Systems** (ISE)
- Engineering, Mechanical** (ME)
- Engineering and Technology** (ET)
- English**
  - English Language and Literature (ENG)
  - Humanities (HUM)
- Environmental Health** (EH)
- Film** (FILM)
- Finance** (FIN)
- Foreign Languages and Literatures**
  - African and Asian Literatures in English
  - Arabic (ARAB)
  - Chinese (CHIN)
  - Classical Archaeology (CLAR)
  - Classical Languages in English (CLNG)
  - French (FR)

Foreign Literatures in English (FLT)  
 German (GER)  
 Greek (GK)  
 Indonesian/Malaysian (INDO)  
 Italian (ITAL)  
 Japanese (JAPN)  
 Latin (LAT)  
 Modern Languages (ML)  
 Russian (RUS)  
 Southeast Asian Literatures in Translation (INDO)  
 Spanish (SPAN)  
 Swahili (SWAH)  
**Geography (GEOG)**  
**Geological Sciences (GEOL)**  
**Health and Sport Sciences**  
 Athletic Training (HSAT)  
 Coeducational Activities (HSC)  
 Health Sciences (HLTH)  
 Men's Activities (HSM)  
 Physical Education and Sport Sciences (HPES)  
 Recreation Studies (HREC)  
 Women's Activities (HSW)  
**Hearing and Speech Sciences (HSS)**  
**History (HIST)**  
**Home Economics**  
 Child Development and Family Life (HECF)  
 Consumer Education (HECE)  
 General Home Economics (HEG)  
 Food and Nutrition (HEFN)  
 Interior Design (HEID)  
 Textiles and Clothing (HETC)  
**Human Resource Management (HRM)**  
**Human Services Technology (HST)**  
**Industrial Hygiene (IH)**  
**Industrial Technology (IT)**  
**International Studies (INST)**  
**Interpersonal Communication (INCO)**  
**Journalism (JOUR)**  
**Law Enforcement Technology (LET)**  
**Linguistics (LING)**  
**Management (MGT)**  
**Management Information Systems (MIS)**  
**Manufacturing Technology (MTCH)**  
**Marketing (MKT)**  
**Mathematics (MATH)**  
**Military Science (MSC)**  
**Music (MUS)**  
 Applied Music  
 Music Education  
 Music History and Literature  
 Independent Studies in Music  
 Music Theory and Composition  
 Music Therapy  
**Nursing**  
 Associate Degree Program (NURS)  
 Baccalaureate Program (NBSP)  
**Office Administration Technology (OAT)**  
**Office Management Technology (OMT)**  
**Ohio Program of Intensive English (OPIE)**  
**Philosophy (PHIL)**  
**Physical Therapy (PT)**  
**Physics and Astronomy**  
 Astronomy (ASTR)  
 Physical Science (PSC)  
 Physics (PHYS)  
**Political Communication (POCO)**  
**Political Science (POLS)**  
**Production/Operations Management (POM)**  
**Psychology (PSY)**  
**Quantitative Business Analysis (QBA)**  
**Radio-Television (RTV)**  
**Real Estate Technology (REAL)**

Security/Safety Technology (SST)  
 Social Work (SW)  
 Sociology (SOC)  
 Telecommunications (TCOM)  
 Theater Arts (THAR)  
 University College (UC)  
 University Professor (UP)  
 Visual Communication (VICO)  
 Women's Studies (WS)  
**Zoological and Biomedical Sciences**  
 Microbiology (MICR)  
 Zoology (ZOO)

## ACCOUNTING

The baccalaureate program of the Department of Accounting prepares men and women for successful careers in the accounting profession.

The program provides the student with a broad knowledge of business concepts, an understanding of the accounting and reporting process, and basic skills in designing accounting information systems and using accounting data for decisions in business, government, and nonprofit organizations.

### 201 Financial Accounting (4)

Prereq: Tier I English and Math, ECON 103. (fall, winter, spring, summer) Introduction to the accounting process and external financial reporting.

### 202 Managerial Accounting (4)

Prereq: 201. (fall, winter, spring, summer) Uses of accounting information for making managerial decisions. Study of cost behavior, overhead costs allocation, basic cost accumulation systems, elementary capital budgeting, master and flexible budgets, and cost control.

### 217 Introduction to Taxation (4)

(fall, spring, summer) Introduction to process of taxation with emphasis on broad provisions of federal income tax as it applies to individuals. (Prereq for ACCT 317.) Required for accounting major.

### 218 Computer Application Software for the Small Business (4)

Prereq: 202, BUSL 255, MIS 200, or perm. Instructs students in hands-on use of accounting software on personal computers; provides survey of record keeping for small business, including tax reporting obligations.

### 303 Intermediate Accounting I (4)

Prereq: 202. (fall, winter) In-depth study of conceptual framework of accounting, disclosure standards for general purpose financial statements, and measurement standards for cash, receivables, inventories, and associated revenues and expenses, including application of compound interest techniques. Required for accounting major.

### 304 Intermediate Accounting II (4)

Prereq: 217, 303, and perm. Avg 2.5 g.p.a. in 4 previous courses usually means acceptance. (winter, spring) Measurement and reporting standards for tangible and intangible operating assets, investments, liabilities, contingencies, stockholders' equity, and special problems of revenue recognition. Required for accounting major.

### 305 Intermediate Accounting III (4)

Prereq: 304. (fall, spring) Measurement and reporting standards for pensions, capital leases, interperiod tax allocation, dilutive securities and earnings per share; accounting changes and error correction; statement of cash flows; financial statement analysis; special disclosure standards; financial reporting and changing prices. Required for accounting major.

### 310 Cost Accounting (4)

Prereq: 202, QBA 201, jr rank. (winter, spring, summer) Emphasis on manufacturing and service organizations. Topics include job order costing, process costing, analysis of cost variances, and complex capital budgeting issues. Required for accounting major.

### 311 Industrial Accounting (4)

Prereq: 201, 202, jr rank. Primarily for nonaccounting majors. Explains how accounting data can be interpreted and applied by

management in planning and controlling business activities. Shows how accounting data can help solve problems confronting management. Attention also given to use of accounting data by investors, potential investors, and lenders. Concentration on use of data rather than collection and presentation.

### 312 Accounting for Health Care Organizations (4)

Prereq: 201 and 202, jr rank. Introduces student to use of accounting data in planning and controlling health care organizations. Basic cost accounting theory and applications stressed as aids to fee setting, budgeting, asset acquisition functions.

### 317 Federal Income Taxes (4)

Prereq: 203 and 217, jr rank or perm. (fall, winter) Continuation of 217 with emphasis on details of federal income tax as it applies to individuals and special provisions which apply to corporations. Required for accounting major.

### 340 Advanced Cost Accounting (4)

Prereq: 310, jr rank. (spring) Current cost accounting topics. May include case studies, computer simulation games, computer projects, and role playing.

### 345 Accounting Systems and Internal Control (4)

Prereq: 217 and 303, or perm. Computer technology as it relates to design, implementation, and operation of accounting information systems. A major portion of the course devoted to internal control procedures. Required for accounting major.

### 347 Tax Research (4)

Prereq: 317, jr rank. (fall) Advanced tax problems of individuals, partnerships, and corporations with emphasis on tax research and research methodology.

### 406 Advanced Financial Accounting (4)

Prereq: 305. (winter, spring) Business mergers, consolidated financial statements, partnerships, international operations, corporate bankruptcy, and branch office accounting. Required for accounting major.

### 407 Seminar in Current Topics (4)

Prereq: 305. (spring) Research in current accounting issues, including written and oral reports of findings.

### 413 Governmental and Nonprofit Theory and Practice (4)

Prereq: ACCT major, 303 or perm. (winter) Accounting theory for governmental and nonprofit organizations; financial reporting; fund accounting; budgeting and control.

### 420 CPA Review (4)

Prereq: sr rank. Thorough analysis and synthesis of accounting theory and practice in preparation for professional certification.

### 451 Auditing Principles (4)

Prereq: 305 and perm. (fall, winter) Basic concepts and applications in external, internal, and governmental auditing. Includes an introduction to current audit technology. Required for accounting major.

### 452 Advanced Auditing (4)

Prereq: 451. (spring) Auditing theory and practice with emphasis on professional standards, ethics, legal liability, special reports, special industries, and advanced auditing techniques.

### 457 Advanced Tax (4)

Prereq: 317 or perm. (spring) Tax aspects of corporate organizations, distributions, reorganizations and liquidations; partnership taxation; Sub S corporations.

### 491 Seminar (3, 4, or 5)

Prereq: perm. Selected topics of current interest in accounting area.

### 497 Independent Research (1-15)

Prereq: perm. Research in selected fields of accounting under direction of faculty member.

### 498 Internship (1-4)

Prereq: perm. (fall, winter, spring, summer).

### 103 Financial Accounting Procedures (3)

Prereq: MATH 101 or concur. (fall) Application of fundamental principles to personal service and mercantile enterprise, with illustrations of double-entry mechanism; procedures of journalizing and posting; accounting for cash, merchandise, notes and interest, revenue and expense; financial statement preparation, including adjusting and closing procedures.

### 104 Financial Accounting Procedures (3)

Prereq: 103, MATH 101 or higher math placement. (winter) Consideration of accounting procedures for purchases, sales (including installment and consignment sale), inventory, prepaid expenses, tangible long-lived assets; accounting procedures for owners' equity in single proprietorship, partnership, and corporation; year-end worksheet procedure; annual report including income statement, balance sheet, and statement of changes in financial position; interim statements.

### 105 Financial Accounting Procedures (3)

Prereq: 104, MATH 113. (spring) Consideration of accounting procedures for corporate form of organization including organization and management, corporate records, capital stock transactions, corporate earnings, corporate bonds; accounting procedures for investments and long-lived intangible assets, branch operations, voucher systems, manufacturing businesses, financial statement analysis.

### 106 Financial Accounting Procedures (3)

Prereq: 104, 105. (spring) Data collection procedure, working paper procedure, and financial statement procedure for service enterprise, mercantile enterprise, and manufacturing enterprises.

### 203 Tax and Governmental Reporting Procedures (4)

Prereq: 104. (fall) Consideration of data sources, forms, and filing requirements for payroll taxes, income taxes, withholding taxes, FICA, sales taxes, unemployment reports, and wide variety of other specialized local, state, and federally required reports and procedures.

### 204 Electronic Data Processing Accounting Procedures (4)

Prereq: 106, CTCH 225, and MATH 113. Consideration of impact of computer and other electronic data processing devices on accounting procedures, including use of specialized machines and programs.

### 205 Manufacturing Accounting I (4)

Prereq: 106. (winter) Data collection procedures for manufacturing firms for actual, normal, and standard job order cost accounting systems, including methodology and data requirements for determination of standards.

### 206 Manufacturing Accounting II (4)

Prereq: 205. (spring) Data collection procedures and reports for manufacturing firms for actual, normal, and standard process cost accounting systems including methodology of allocation of service department costs.

### 209 Business Statistics (4)

Prereq: MATH 113. Basic statistics, demonstrated and developed through problems typical of actual business situations. Procedures and applications of statistical analysis and inference as they relate to business activity.

### 225 Federal Income Tax Procedures (4)

Prereq: for credit, 203; for noncredit, perm. Comprehensive course in fundamentals of federal income taxation and preparation of individual, partnership, and corporation tax returns. (Required of all acct. tech. majors.)

### 241 Auditing Procedures (4)

Prereq: 203. (fall) Study of purposes and scope of audits including audit objectives, professional ethics, audit files and working papers, legal responsibilities, internal control, statistical sampling, tests of transactions, audit procedures and disclosure requirements, and preparation of audit reports. This course is intended to prepare the associate degree graduate to enter the public accounting field as assistant to a licensed professional.

### 299 Independent Study (1-5)

Prereq: perm of instructor. Supervised independent study projects in accounting technology.

## ACCOUNTING TECHNOLOGY

The following courses for the A.A.B. program in accounting technology are available only on the Lancaster campus.

## AEROSPACE STUDIES (Air Force ROTC)

The Department of Aerospace Studies offers three programs, all of which lead to a commission as a second lieutenant in the United States Air Force.\*

The four-year program is designed for students who can begin Air Force ROTC with the fall quarter of their freshman year and complete aerospace studies requirements by their date of graduation. Students taking the four-year program begin by enrolling in AST 101. Out-of-sequence courses can be scheduled by arrangement with the Department of Aerospace Studies.

The two-year program is designed for students unable to take Air Force ROTC during their first two years of college. It is similar to the last two years of the four-year program. Students interested in this program should consult the chair of aerospace studies during their freshman year (or, in any event, not later than the beginning of the fall quarter of the sophomore year) for instructions regarding application for this program.

The one-year program is limited to electrical engineering, computer science, and nursing majors. Students interested in this program should consult the chair of the Department of Aerospace Studies for further information.

Entry into the Professional Officer Course (AST 300 and 400 series) is based upon a best-qualified selection process. Completion of the General Military Course (AST 100 and 200 series) does not guarantee entry into the Professional Officer Course (POC), but makes one eligible to compete for acceptance into the POC. After achieving commissioned status, the officer serves a minimum of four years active duty with the United States Air Force. For further information contact the Chair of Aerospace Studies, 232 Lindley Hall.

\*Students enrolled in any program may compete for scholarships which pay full tuition, books, lab fees, and a tax-free monthly allowance.

### 101 Introduction to the U.S. Air Force (1)

(fall) Doctrine, mission, and organization of United States Air Force and officership and U.S. strategic offensive forces. 1 hr of academics and 1 hr of leadership lab each wk.

### 102 Strategic, Tactical, and Support Forces (1)

(winter) U.S. defensive forces, their mission, function, and employment of nuclear weapons, civil defense, and aerospace defense. 1 hr of academics and 1 hr of leadership lab each wk.

### 103 Training and Mission Support (1)

(spring) U.S. Air Force training and support activities, with special attention given to review of Army, Navy, and Marine general purpose forces. Principles and theory of flight. 1 hr of academics and 1 hr of leadership lab each wk.

### 201 Development of Airpower (1)

(fall) History and development of airpower in U.S. 1 hr of academics and 1 hr of leadership lab each wk.

### 202 Contemporary Aerospace Power (1)

(winter) Covers Air Force concepts, doctrine, and employment; how technology has affected growth and development of air power. 1 hr of academics and 1 hr of leadership lab each wk.

### 203 Current and Future Employment of Aerospace Forces (1)

(spring) Changing mission of defense establishment; how air power is employed in military, nonmilitary, and strategic operations. 1 hr of academics and 1 hr of leadership lab each wk.

### 301 Air Force Communications (3)

Prereq: POC status or perm. (fall) Development of communication skills in the Air Force style and format. Emphasis on basic writing and briefing techniques; counseling fundamentals of the Air Force officer and the officer promotion system are also reviewed. Leadership lab provides opportunity to practice skills learned. 3 hrs. of academics and 1 hr. of leadership lab per week.

### 302 Air Force Concepts and Practices I: Management (3)

Prereq: 301 or perm. (winter) Review of selected concepts, principles, and theories of management as applied in the Air Force. Continued development of communication and leadership skills. 3 hrs. of academics and 1 hr. of leadership lab per week.

### 303 Air Force Concepts and Practices II: Leadership (3)

Prereq: 302 or perm. (spring) Military professionalism and leadership theory; strengths and weaknesses of various leadership

styles; review of responsibilities, authority, and functions of Air Force officers. Continued development of communication and leadership skills. 3 hrs. of academics and 1 hr. of leadership lab per week.

### 401 The Military and the American Society (3)

Prereq: POC status or perm. (fall) Study of military and professional soldier in democratic society and military as socializing institution. Communicative skills via student oral presentations and written reports emphasized. 3 hrs. of academics and 1 hr. of leadership lab each week.

### 402 Strategy and the Use of Force (3)

Prereq: 401 or perm. (winter) Evaluation of strategy and study of arms control, general and limited war. Continues communicative skills via student presentations and written reports. Emphasizes qualities and techniques of leadership. 3 hrs. of academics and 1 hr. of leadership lab each week.

### 403 American Defense Policymaking (3)

Prereq: 402 or perm. (spring) Organization and case studies in defense policymaking and bureaucratic decision making. Continues communicative skills and techniques of leadership. Examines military law. 3 hrs. of academics and 1 hr. of leadership lab per week.

NOTE: 300 and 400 level courses are offered in alternate years.

## AFRICAN STUDIES

See International Studies.

## AFRO-AMERICAN STUDIES

The Department of Afro-American Studies (AAS) offers both a major and a minor on the undergraduate level. Graduates completing the major program receive a Bachelor of Arts degree with a major in Afro-American studies. The range of courses includes communication, education, political science, psychology, social science, art, literature, and music, as these reflect the Afro-American and Third World experience.

The requirements for a major consist of 56 quarter hours, including the core requirements of AAS 101; AAS 106; AAS 202; and one course from AAS 110, 150, or 180. Within the 56 hours, at least 28 must be in one of two focal areas — either the social sciences or the arts and humanities. That focal area must include at least one course from four of the groups below and at least 16 hours at or above the 300 level.

The social science groups are (1) history—AAS 225, 235, 254, 340, 364; (2) sociology/psychology—AAS 331, 341, 345, 430, 431, 440/540, 482/582, 494; (3) political science—AAS 360, 368, 370, 430; (4) economics—AAS 432, 532, 460; and 465; (5) education—AAS 380, 542.

The arts and humanities groups are (1) literature (Afro-American)—AAS 210, 211, 310, 311, 411; (2) literature (intercultural)—AAS 315, 316, 317, 318; (3) arts—AAS 250, 350, 490B, 490C, 490D; (4) music—AAS 355, 356, 357, 490A.

### The Minor

The minor in Afro-American Studies is available to all undergraduate students regardless of major. The requirements for a minor consist of a minimum of 28 hours of coursework in one of two options: the minor concentration or the interdisciplinary minor. The minor concentration in either social sciences or the arts and humanities consists of a minimum of 28 hours, including at least 20 hours in the chosen area, and AAS 101, Afro-American History I, and AAS 106, Introduction to Afro-American Studies.

The interdisciplinary concentration requires at least one course from each of the two focal areas; at least two additional courses at the junior or senior level; and AAS 101, Afro-American History I and AAS 106, Introduction to Afro-American Studies.

### Grade-Point Average

The minimum grade-point average for graduation is a 2.0 (C) on a 4.0 scale in all courses attempted. A "C" grade also is required in each major course.

**Academic Advising**

Advising is an essential element in the Afro American Studies Program. Each student works closely with a faculty member whose expertise and interests are related to the student's academic pursuits.

**101 Afro-American History I, 1526-1865 (4) (2S)**  
Survey of key economic, political, ideological, and social elements that shaped destinies of black people in United States from 1526 to 1865.

**106 Introduction to Afro-American Studies (5)**  
Interdisciplinary course designed to introduce students to field of Afro American studies. Focuses upon subject matter, scope, assumptions, and methods of various academic disciplines that are constituent parts of Afro American Studies Program, and seeks to show how these disciplines collectively contribute to broadest understanding of Afro-American experience and, thus, of the general American experience from black perspective.

**110 Introduction to Afro-American Literature (4) (2H)**  
Provides general introduction to and overview of canon of Afro-American literature. By examining variety of texts, genres, themes, and issues in literature by black Americans, seeks to establish foundations and achievements of Afro-American literary tradition. Examines various critical approaches to study of literature.

**135 History of Colonialism (4)**  
Historical social analysis of development of colonialism in Africa, how colonialism led to underdevelopment of Africa, and review of ideological justification of this phenomenon. Special focus placed on development of colonialism in 19th and 20th centuries up to Year of Africa (1960). Specific attention given to ideological contribution of Frantz Fanon to colonial situation. Combination of books in fields of history, psychology, economics, and literature so student will obtain integral picture of colonial period.

**150 Introduction to Black Media (5) (2H)**  
Historical analysis of images of blacks in cinema, radio, and television programming; origin and development of stereotypes; relationship of these images to societal developments; examination of alternatives.

**180 Introduction to Afro-American Education (4)**  
Explores historical and philosophical foundations, development of education for Afro-Americans, and formulation of dual educational system. Further, makes comparisons and contrasts among various philosophical views which have shaped formation of American educational institutions, theories, and practices.

**202 Afro-American History II, 1865 to Present (4) (2S)**  
Survey of key economic, political, ideological, and social elements that have shaped destinies of black people in United States from 1865 to present.

**210 Afro-American Literature I (4) (2H)**  
First of 2-qtr survey of Afro-American literature. Covers period from about 1760 to end of Harlem Renaissance. Focuses on such writers as Phillis Wheatley, Frederick Douglass, Charles W. Chesnutt, Paul Laurence Dunbar, James Weldon Johnson, and writers of Harlem Renaissance — Claude McKay, Jean Toomer, Langston Hughes, Countee Cullen, Zora Neale Hurston. Folk literature and other materials important to understanding of Afro-American literary tradition will be included.

**211 Afro-American Literature II (4) (2H)**  
Begins where 210 ends. (However, 210 not a prereq.) Treats Afro-American literary expression from around 1940 to present. Writers included are Richard Wright, Margaret Walker, Gwendolyn Brooks, Ralph Ellison, James Baldwin, Amiri Baraka, Ishmael Reed, and others who have contributed to Afro-American literary tradition.

**220 Theories of Afro-American Social Development (4)**  
Exploration of theories of political policies and economic processes, their interrelations, and their influence on socio-economic character of black community.

**225 History of the Black Worker (4)**  
Analysis of historical role of black labor force in American economy, with emphasis on patterns of relationships between black workers and general organization of American labor movement.

**235 Comparative Neo Colonialism (4)**  
Attention paid to historical social analysis of neo colonialism — how new methods and maneuvers used to exploit labor and resources in 20th century. Focus on Africa, although students' areas of interest will also be accommodated.

**250 Foundations of Afro-American Arts and Culture (4) (2H)**  
Provides introductory examination of Afro-American experience through concern with socio cultural approaches to modes of thought, cultural institutions, historical experiences, life-styles, and artistic expression. As cultural history, designed to provide understanding of foundations, sources, and history of ideas of Afro American experience. Considers influence of traditional African arts and culture on development of cultural traditions in Americas, early Afro American arts and crafts, and development of the Afro American culture tradition from slavery to present.

**254 History of Injustice in the United States (5)**  
Critical analysis of problems of injustice in U.S. Special attention given to 1) education, 2) voting, 3) social services, 4) fair housing, and 5) legal system.

**310 Contemporary Afro-American Literature (4)**  
Focuses on Afro-American literature of 1960s and since. Concern with writers who emerged as major figures during this period. Attention also given to major literary, cultural, and esthetic developments that fashioned new favorability among black writers.

**311 Afro-American Literature: Special Topics (4)**  
Prereq: soph rank. Intensive study of selected theme or topic. Course will vary from qtr to qtr; thus students should check departmental brochure to ascertain topic any given qtr.

**315 Literature of West Africa (4)**  
Prereq: jr or sr rank. Intensive examination of representative works, authors, and movements. Using cultural and socio-political perspectives, course seeks to define style, structure, and mode and to indicate how these interrelate, help to determine meaning, form, etc. Authors like Achebe, Armah, Senghor, Soyinka, Laye and Oyono, Mongo Beti and Kofi, Awoonor, and Ama Ata Aidoo considered, to analyze, e.g., Negritude, phases in West African writing during last 30 yrs. Essays and critical literature given some attention.

**316 Literature of South Africa (4)**  
Explores development of South African literature since 1940s and, while confining itself to writings of black writers of all complexions, examines how this literature reflects conditions of life of majority of South African population. Course entails vast landscape of structured background reading on history, politics, economics, and demography of South Africa and on aesthetics of particular cultures.

**317 Caribbean Literature: Major Authors and Movements (4)**  
Survey of literature in English and translations written by Caribbean authors. Major themes and literary movements of Caribbean discussed: Negritude, Negrismo, ancestral imperative, search for identity, reordering of group images. Transcultural and syncretic elements discussed. Outside readings essential for class contributions.

**340 The Black Community in Post-World War II (4)**  
Survey of black community's development during 20th century and its relation to development of larger American society over same period. Focus on post-WWII community processes.

**341 Afro-American Personality (4)**  
Prereq: PSY 101. Examination of organization and structure of Afro-American personality within American and African socio-psychological contexts. Special emphasis on various forces which shape Afro-American personality.

**345 The Black Woman (4)**  
Prereq: soph rank and perm. Roles of black women in education, social development, and stabilization of their families. Impact of history of oppression and struggle on social psychology of black women.

**350 Afro-American Arts and Artists (4) (2H)**  
Intensive study of Afro American artists, aesthetic principles, and arts movements in contemporary black art from the late 19th century to present. Development of black professional artists,

artists of Harlem Renaissance, black cultural nationalist art, modernism and Afro-American artists, social protest, and street murals among topics covered.

### 355 History of Afro-American Music I Slavery - 1926 (4)

Socio-historical examination of Afro-American music and its role in shaping American music. Recordings and guest lecturers used as integral part of course. Examines spirituals, rural blues, ragtime, and early jazz.

### 356 History of Afro-American Music II 1926 - Present (4)

Socio-historical analysis of Afro-American music, its role in shaping modern American music. Recordings and guest musician/lecturers used as integral part of course. Examines big band era, urban blues, bebop, rhythm and blues, hard bop, black classical composers, contemporary popular, and avant-garde musics.

### 359 Contemporary Black Cinema (4)

Examines esthetics in black cinema of Afro-America, Caribbean, and Africa in post-WW II era. Examines representative black filmmakers and films deriving from black socio-cultural tradition. Representative films screened and discussed. Selected filmmakers and/or critics will make presentations on esthetics in black cinema. Interdisciplinary format coalescing various areas of arts and humanities and involving philosophy of art and esthetics, film theory and criticism, cultural criticism, and political economy of film.

### 360 Black Politics in the United States (4)

Examines American political system from perspective of black political behavior and relationship of blacks to political system at national, state, and local levels. Includes analysis of civil rights movement as well as socio-political movements associated with ideologies of black nationalism and black liberation.

### 364 Comparative Study of Injustice (4)

Comparative analysis of different approaches to civil and human rights in selected developed and developing countries. Review of theory of justice and political consequences in chosen countries.

### 368 Black Political Thought (4)

Analysis of basic tenets of black thought in U.S. Emphasis on theoretical dimensions of post-Civil War black social and political thinkers.

### 370 Urban Violence (4)

Systematically examines empirical and theoretical literature on urban violence, particularly riots during 1960s.

### 380 Seminar in Afro-American Education (4)

Prereq: 8 hrs. of education or social science. An examination of critical issues in contemporary society that affect the education of Afro-Americans. Topics to be explored include status and preparation of teachers, curriculum development, educating black children for the 21st century, multicultural education, impact of computer technology and scientific developments, as they affect Afro-American students, teachers, and parents.

### 411 Literature Seminar (4)

Subject will vary. May be repeated as subject changes.

### 430 Social Theories of Underdevelopment (4)

Systematic review of problems of social change in developing areas from multidisciplinary point of view. Due attention given to problems of agrarian reform, urbanization as social process, regional disparities within framework of single nation/state *inter alia*. Comparative analysis of problems of social development undertaken typologically.

### 431 Psychology of Neo-Colonialism (4)

Examination of role of neo-colonialism in shaping social psychology of oppressed. Special examination made of works of Fanon, et al.

### 432 Third World National Movements (4)

Comparative study of varieties of national oppression. Question of ethnonationalism, clerical nationalism, and other forms of response to oppression reviewed. Due attention given to various notions of Pan-Africanism, and Black Nationalism in U.S., Africa, and Latin America.

### 440 The Black Child (4)

Entails in-depth analysis of black child, impact and effects of growing up black in America. Specifically, seeks to determine

effects and role of family, school, neighborhood, economic status, and society at large on sociological and psychological development of black child.

### 460 Social Processes: Third World Urbanization (4)

Deals with laws of development of urbanization as it relates to anatomy of civil society. Special focus on how current urban crisis related to structural, cyclical, and general crisis of modern society. Political economy of urban ghetto both in U.S. and Third World singled out for special inquiry. New thought given to suburbanization process, so called "Post City Phenomenon," etc. Due focus on connection between urban crisis, racial problems, and possibility of American apartheid. Urbanization as social process in Africa, Asia, and Latin America studied comparatively.

### 482 The Black Family (5)

Black family in America and its important role in development of ethnic differences, strengths, and strategies.

### 490 Independent Study (1-5)

Prereq: prior perm. Primarily for students interested in concentrated study in specific area in cooperation with advisor.

## ANTHROPOLOGY

### General Emphasis

Anthropology may be broadly defined as the scientific study of humankind. This discipline has two major foci: humans as biological organisms and as cultural beings. Anthropology has three subfields: biological anthropology, cultural anthropology, and archaeology. Anthropology is a holistic, comparative, and functional discipline which provides a broad framework through which human activities, adaptations, and changes may be meaningfully interpreted in time and in space. Much of anthropology deals with non-Western cultures. Courses in anthropology provide a cross-cultural awareness to students in all fields and are particularly useful for students in the social sciences, environmental sciences, journalism, education, biological sciences, linguistics, cross-cultural communication, dance, photography, film, and others.

### Preparation in Anthropology

Students who are interested in becoming professional anthropologists may prepare for graduate school in the Department of Sociology and Anthropology. The anthropology major offers students training in the methods and results of cultural anthropology, biological anthropology, and anthropological archaeology. A minor in anthropology is also available for those students who wish to add a non-Western cultures dimension to their University education.

### Advising

Majors are required to select their advisors from among the anthropology faculty. As student interest shifts, the advisor may be changed to reflect new interests. An advisor will aid in the design of an individualized course of study. Nonanthropology courses can be declared as anthropology credit toward the major with permission from the advisor: for example, an interest in ethnobotany may lead to botany courses counting as part of an anthropology major. Of the total hours required, however, no fewer than 43 hours must be in departmental anthropology courses. Students are encouraged to take courses in fields related to anthropology (for instance, courses in botany, zoology, geology, geography, history, linguistics, international studies, mathematics, psychology, sociology, and so on may be recommended for students interested in particular anthropological specialties). All majors are required to take the introductory courses in cultural anthropology (101); biological anthropology (201); and anthropological archaeology (202).

### Course Requirements

#### For a major in anthropology:

	Credit Hours
ANTH 101 plus 4 hours of cultural anthropology selected from 348-351, 355, 357-372, 375-381, 385-387, 460, 494A, and, when the topic is appropriate, 373, 455, 494D	9
ANTH 201 plus 4 hours of biological anthropology selected from 391, 492, 494B, 496, and, when the topic is right, 373, 494D	9
ANTH 202 plus 4 hours of archaeological anthropology from 352, 361, 378, 382, 494C, and, when the topic is right, 373, 455, 494D	9



8 additional hours in anthropology at the 400 level, divided between 2 of the 3 main areas above .....	8
20 additional hours in anthropology at any level .....	20
<b>TOTAL.....</b>	<b>55</b>

**For a minor in anthropology:**

	Credit Hours
ANTH 101 .....	5
ANTH 201 or 202 (both recommended) .....	5
16 additional hours in anthropology (to include 4 hours at 400 level and 4 additional hours at the 300 or 400 level) .....	16
<b>TOTAL.....</b>	<b>26</b>

**101 Introduction to Cultural Anthropology (5) (2T)**  
Basic concepts; introduction to various world cultures; nature of cultural diversity; evolution of sociocultural systems. Qualifies as Tier II Third World Cultures course.

**201 Introduction to Biological Anthropology (5) (2N)**  
Evolutionary theory; primates; fossil record of human evolution; mechanics of evolution; human variation.

**202 Introduction to Anthropological Archaeology (5) (2S)**  
Basic concepts, and how archaeologists date and reconstruct extinct lifeways and explore evolution.

**301 Anthropology and Film (5)**  
Prereq: 101 or perm. The use of film as a medium for recording cultural information; as a technique for observation, analysis, and interpretation of cultural information; and as a means for presenting information about cultures, human adaptation, human evolution, and anthropological research itself.

**345 Gender in Cross-Cultural Perspective (4)**  
Prereq: 101 and soph rank. Considers the range of cultural diversity in defining gender roles; comparative approach towards understanding the behaviors and perceptions associated with gender.

**348 Education: Cross-Cultural Perspectives (4)**  
Prereq: 101. Survey of ways of growing up in various cultures, emphasizing relationships between individual and culture.

**350 Economic Anthropology (4)**  
Prereq: 101. Survey of economic arrangements found in various types of cultural systems; economic exchange systems in non-Western cultures; anthropological analysis of economic life.

**351 Political Anthropology (4)**  
Prereq: 101. Anthropological exploration of various political systems around world; cross-cultural examination of political leadership, political power, warfare, etc. Emphasis on non-Western, non-industrialized cultures.

**352 Archaeological Anthropology (4)**  
Prereq: 101 or 202 or perm. Explores contemporary archaeology in which goals, theory, and method are directed toward reconstruction of extinct sociocultural systems rather than toward time-space distribution of archaeological materials.

**355 Medical Anthropology (4)**  
Prereq: 101. Non-Western medical systems and theories of health and disease causation; social basis for diagnosis and cure; curing rituals; symbolism of health and illness. Ecological factors in health and nonhealth; systemic connections between health concepts, culture, and environmental situation.

**356J Writing in Sociology and Anthropology (4) (1J)**  
Prereq: jr rank and perm or 13 hrs sociology and/or anthropology. Jr-level composition course for sociology and anthropology majors and students in related fields. Combines writing instruction with consideration of substantive social science topic. Students will try various genres of social science writing (book reviews, grant proposals, field notes, interviews, etc.).

**357 Anthropology of Religion (4)**  
Prereq: 101. Anthropological consideration of ritual and myth in various cultures; shamanism, trance, taboo, etc., in social systemic, symbolic, structuralist, and ecological perspective. Comparison of different anthropological frameworks for understanding religious phenomena in an objective, social scientific way.

**361 North American Prehistory (4)**

Prereq: 101, 202 or perm. Analysis and interpretation of the cultural evolution of indigenous North American Indian cultures. Emphasis placed on those cultures from Ohio and the Midwest.

**366 Cultures of the Americas (4)**

Prereq: 101. Survey of past and/or present cultural diversity present in North, South, or MesoAmerica or the Caribbean with emphasis on application of anthropological method and theory to understanding of particular sociocultural systems. Emphasis varies by instructor.

**368 Latin American Prehistory (4)**

Prereq: 101, 202, or perm. Reconstruction, analysis, and interpretation of the process of cultural evolution in pre-Hispanic Latin America.

**371 Ethnology (4)**

Prereq: 101. In-depth consideration of topics covered in 101; anthropological theory and frames of analysis.

**372 Cultures of the World (4)**

Prereq: 101. Ethnographic sampling of similarities and differences in cultural systems found around world and through time. Ethnographic focus varies. May be taken twice for credit.

**373 Perspectives in Anthropology (4)**

Prereq: 101, 201, or 202. Includes topics from following areas of anthropological concern: nature of scientific inquiry, ethnology, linguistics, archaeology, biological anthropology.

**375 Culture and Personality (4)**

Prereq: 101; psychology recommended. Interrelations between personality systems and cultural systems.

**376 Culture Contact and Change (4)**

Prereq: 101. Impacts of cultures upon one another; immediate and subsequent cultural adaptations; theory of change.

**377 Peasant Communities (4)**

Prereq: 101. Focuses on folk component of state societies.

**378 Human Ecology (4)**

Prereq: 101 or 201. Analysis of mutual and reciprocal relations between sociocultural systems and other systems in their environment; ecosystems and biotic communities in which human populations are included.

**381 Cultures of Sub-Saharan Africa (4)**

Prereq: 101. Survey of cultural diversity present in Sub-Saharan Africa with emphasis on application of anthropological theory and method to understanding of particular sociocultural systems.

**385 Cultures of Southeast Asia (4)**

Prereq: 101. Survey of cultural systems of island and mainland Southeast Asia.

**386 Problems in Southeast Asian Anthropology (4)**

Prereq: 101. Selected topics of current theoretical concern relating to Southeast Asia; comparison of different frames of analysis.

**387 Pacific Island Cultures (4)**

Prereq: 101. Anthropological exploration of Pacific Island cultures and their evolution.

**391 Primate Social Organization (4)**

Prereq: 101. Exploration of nonhuman primate social behavior and social organization from anthropological perspective, with special focus on development of human cultural behavior.

**399 Readings in Anthropology (1-3, max 6)**

Prereq: 101 and perm in advance. Supervised readings in various fields of anthropology: archaeology, ethnology, linguistics, biological anthropology.

**455 Seminar in Methodology and Field Research (1-4, max 8)**

Prereq: 13 hrs and perm. Practical training in application of methods to data in one of following subfields: archaeology, ethnology, biological anthropology.

**460 Kinship (4)**

Prereq: 9 hrs. Theoretical framework and ethnographic work on kinship systems of various world cultures; non-Western family systems; kinship terminology, social change in kinship systems.

**465 Field School in Ohio Archaeology (5-10)**

Prereq: perm. Actual archaeological investigation of prehistoric Indian sites in Ohio. Involves survey, excavation, and laboratory

analysis of materials, as well as lectures on anthropological archaeology as they pertain to Ohio.

#### **472 History of Anthropological Thought (4)**

Prereq: 101, 201, or 202. In-depth examination of schools of anthropology as they have developed within various subfields at different times and places.

#### **490 Independent Research in Anthropology (1-10, max 10)**

Prereq: open to srs only; 20 hrs anthropology and written perm prior to qtr in which study is begun. Individual research in anthropology in specific problem areas in which student has demonstrated ability and interest.

#### **492 Human Evolution (4)**

Prereq: 201. In-depth examination of evidence for biological macro-evolution of humankind. Hominoid and hominid fossil record; speculation; interpretation of fossil remains; and "fit" between paleontological and immunological approaches.

#### **494A Seminar in Cultural Anthropology (4)**

Prereq: 2 anthropology courses at 300 level or above, OR perm. Advanced course dealing with topics of current research interest in cultural anthropology. Topic varies according to individual course.

#### **494B Seminar in Biological Anthropology (4)**

Prereq: 2 anthropology courses at 300 level or above, OR perm. Advanced course dealing with topics of current research interest in biological anthropology. Topic varies according to individual course.

#### **494C Seminar in Archaeological Anthropology (4)**

Prereq: 2 anthropology courses at 300 level or above, OR perm. Advanced course dealing with topics of current research interest in archaeological anthropology. Topic varies according to individual course.

#### **494D Seminar in Human Ecology (4)**

Prereq: 2 anthropology courses at 300 level or above, OR perm. Advanced course dealing with topics of current research interest in human ecology. Topic varies according to individual course.

#### **496 Human Diversity (4)**

Prereq: 201. Exploration of human biological diversity/variability with emphasis on the populationist approach, namely anthropological genetics and demography.

## **ARABIC**

See Foreign Languages and Literatures.

## **ARCHAEOLOGY**

Classical Archaeology, see Foreign Languages and Literatures. Anthropological Archaeology, see Anthropology.

## **ART**

**100 Seeing and Knowing the Visual Arts (3) (2H)**  
Introduction to perceiving and understanding meanings and organizational systems in traditional and contemporary visual arts in context of their social and cultural backgrounds.

#### **101 Two-Dimensional Design (4)**

Studio projects exploring vocabulary of 2-dimensional design and dynamics of color systems. Introduction to processes and media. Not open to jr or sr art majors.

#### **102 Three-Dimensional Design (4)**

Studio projects in 3 dimensions exploring ordered and dynamic interactions of mass, plane, volume, and space. Introduction to processes and media. Not open to jr or sr art majors.

#### **115 Introduction to Ceramics (4)**

Exploration of ceramic techniques for familiarization with range of expression available through ceramic materials. Projects, demonstrations, lectures, and discussions. Not open to jr or sr art majors. Not prereq. to 215.

#### **128 Introduction to Drawing (4)**

Use of line, tone, perspective, and texture in objective drawing; development of motor control and visual skills; use of drawing tools. Not open to jr or sr art majors.

#### **131 Introduction to Sculpture (4)**

Exploration of traditional and modern concepts of sculpture; lectures, projects and discussions. Not open to jr or sr art majors. Not prereq. to 231, 232, or 236.

#### **151 Introduction to Graphic Design (4)**

Studio projects in lettering, typography, spatial design, illustration, and media with emphasis on graphic design as visual communication. Not open to jr or sr art majors.

#### **191 Introduction to Photography (4)**

Introduction to techniques and art of photography for majors or nonmajors. Students must have suitable cameras and supply light-sensitive materials and processing.

#### **192 Basic Photography (4)**

Prereq: 191 or portfolio and perm. Continuation of 191. Approaches picture-making problems and advanced control of media for prospective majors.

#### **205 Basic Painting (4)**

Prereq: 101, 102, and 128 or perm. Development of formal, technical, and conceptual attitudes in painting.

#### **206 Intermediate Painting (4)**

Prereq: 205. Problems in painting investigating recent developments and formal concepts.

#### **207 Intermediate Painting (4)**

Prereq: 206. Continuation of 206.

#### **215 Handbuilding (4)**

Prereq: 101, 102, and 128 or perm. 3-D form exploration using additive construction processes. Simple engobe, slips, and claybody formulations accompany these projects.

#### **216 Introduction to Wheel Throwing (4)**

Prereq: 101, 102, and 128 or perm. Introduction to creative possibilities of potter's wheel. Functional projects utilizing decorative skills from ART 215.

#### **217 Combined Techniques (4)**

Prereq: 215, 216. Projects designed to expand information introduced in 215, 216. Increase in scale and scope of individual solutions. Wheel throwing and handbuilding.

#### **228 Basic Drawing (4)**

Prereq: 101, 102, and 128 or perm. Emphasis on techniques of drawing. Composition, proportion, and disciplined seeing; text may be used.

#### **231 Sculpture: Wood (4)**

Prereq: 101, 102, and 128 or perm. Introduction to tools, techniques, and aesthetics of sculpture in wood.

#### **232 Sculpture: Figure Modeling (4)**

Prereq: 101, 102, and 128 or perm. Introduction to sculpture in clay, based upon human figure; includes slide presentations; expression through form and gesture emphasized.

#### **241 Lithography (4)**

Prereq: 101, 102, and 128 or perm. Introduction to basic lithographic drawing and printing. Emphasis on application of techniques to image making.

#### **242 Etching (4)**

Prereq: 101, 102, and 128 or perm. Introduction to basic techniques of intaglio printmaking including etching, dry-point, aquatint, and color printing. Emphasis on application of techniques to image making.

#### **247 Relief Printing (4)**

Prereq: 101, 102, and 128 or perm. Basic techniques of relief printing from wood, metal, and assembled plates in black and white and color. Emphasis on application of techniques to image making.

**248 Serigraphy (4)**

Prereq: 101, 102, and 128 or perm. Basic techniques of screen printing including hand-cut stencils, photographic stencils, and multicolor printing. Emphasis on application of techniques to image making.

**250 Graphic Design Principles (4)**

Prereq: 101, 102, and 128. Explores principles of design through formal introduction to design methodology and theories of communication. Specific problems are developed from concept, through synthesis of form and semantic meaning, into visual communication.

**251 Typography (4)**

Prereq: 101, 102, and 128 or perm. Typography as designer's tool and as communication. Emphasis on design of symbols and type faces.

**252 Graphic Design: Three-Dimensional (4)**

Prereq: 101, 102, and 128 or perm. Examination of 3-dimensional design problems with special attention to environment, packaging, and display.

**254 Lettering (4)**

Prereq: 101, 102, and 128 or perm. Lettering as design and communication element. History and techniques of lettering and calligraphy.

**256 Illustration (4)**

Prereq: 101, 102, and 128 or perm. Basic concepts of pictorial organization; black and white and two-color camera-ready techniques; assignments exploring narrative, juxtaposed, manipulated, and sequential images.

**271 Introduction to Art Therapy (5)**

Prereq: PSY 101 and 12 hrs studio art. Survey of art therapy field, its history and background. Exploration of basic theoretical concepts, use of case histories, research methods, and present clinical practices.

**275 Fibers (4)**

Prereq: 12 hrs studio art or perm. Felting, spinning, natural dyeing methods; off-loom fabric constructions.

**276 Fibers (4)**

Prereq: 275 or perm. Introduction to weaving on multi-harness floor looms.

**291 Photographic Manipulation (4)**

Prereq: 192 or portfolio and perm. Exploration of image controls allowed by basic variations of camera format, manner of negative production and process, and nonstandard print techniques.

**295 Intermediate Photography (5)**

Prereq: 192, portfolio review, and perm. Thorough presentation of craftsmanship in photography with emphasis on esthetics and techniques of photography.

**296 Intermediate Photography (5)**

Prereq: 295. Continuation of 295 with emphasis on in-depth investigation of qualities of contemporary monochrome materials.

**297 Intermediate Photography (5)**

Prereq: 296. Color printing from negative color materials.

**300J Criticism in the Visual Arts (4) (1J)**

Prereq: AH 211, 213, or perm. Tier I composition class designed to encourage understanding of historical perspectives in critical writings on visual arts. Students will read and examine written criticism; develop research, grammar, and editing skills; and write analytical descriptive essays on appropriate visual arts subjects.

**303 Watercolor (5)**

Prereq: jr rank. Techniques of transparent watercolor.

**304 Watercolor (5)**

Prereq: 303. Continuation of 303.

**305 Advanced Painting (5)**

Prereq: 207 and perm. Development of personal goals and identification of issues with emphasis on individual, creative problems in painting.

**306 Advanced Painting (5)**

Prereq: 305. Continuation of 305.

**307 Advanced Painting (5)**

Prereq: 306. Continuation of 305-306.

**308 Figure Painting (5)**

Prereq: 207. Painting from model.

**309 Figure Painting (5)**

Prereq: 308. Continuation of 308.

**312 Ceramic Throwing (3)**

Prereq: 216 or perm. Intermediate throwing problems. Throwing pursued with goal of developing skilled production potters. Course content directed toward, but not limited to, utilitarian object making. Sensitivity toward quality of ware and value of hand-made object stressed.

**313 Advanced Ceramic Throwing (3)**

Prereq: 312 or perm. Continuation of 312.

**314 Ceramic Material (3)**

Prereq: jr rank or perm. Comprehensive study of function of ceramic materials in clay and glazes, effect of firing temperatures, and practical and empirical techniques of using ceramic materials.

**315 Ceramics (5)**

Prereq: 217. Clay body formulation, wheel throwing, hand building, engobes, kiln firing, salt glazing, and vapor glazing techniques.

**316 Ceramics: Porcelain (5)**

Prereq: 217. Study of white and porcelainous clay materials, effects on glazes, and limiting characteristics.

**317 Ceramics: Stoneware (5)**

Prereq: 316. Stoneware materials and high-temperature reduction firing.

**321 Drawing Workshop (4)**

Prereq: jr rank. (not offered every quarter) Projects using traditional techniques and drawing media including pen and ink and silver-point.

**322 Drawing Workshop (4)**

Prereq: 321. Continuation of 321.

**328 Drawing (4)**

Prereq: 228 and perm. (not offered every quarter) Drawing from model. Proportion, structure, and form. Various media.

**329 Drawing (4)**

Prereq: 328. (not offered every quarter) Approach to personal imagery in drawing. Individual response to traditional and modern drawing attitudes.

**331 Sculpture: Wood (5)**

Prereq: 8 hrs sculpture or perm. Advanced wood sculpture.

**332 Sculpture: Figure Modeling (5)**

Prereq: 8 hrs sculpture or perm. Figure studies in clay. To develop better perceptions of masses in space and aesthetic relationships. Expression through form and gesture emphasized.

**333 Sculpture: Metals (5)**

Prereq: 8 hrs sculpture or perm. Introduction to techniques of sculpture in metal including casting and welding processes and historical and aesthetic development.

**334 Sculpture: Fabrication (5)**

Prereq: 8 hrs sculpture or perm. Introduction to joining and fastening techniques, additive sculptural processes, and use of power equipment and hand tools in production of sculpture; development of sensitivity toward sculptural ideas.

**341 Prints (5)**

Prereq: 8 hrs printmaking. Supervised studio experience in printmaking media of student's choice (intaglio, lithography, relief and/or serigraphy); includes demonstrations and lectures on related topics. Emphasis on development of techniques and concepts of printmaking.

**342 Prints (5)**

Prereq: 341. Continuation of 341.

**343 Prints (5)**

Prereq: 342. Continuation of 341-342.

**351 Graphic Design: Junior Studio (5)**

Prereq: 12 hrs 200-level graphic design, portfolio review, and perm. In depth color theory and color design studies. Projects focusing on use of color in visual communication concepts and graphic design applications.

**352 Graphic Design: Junior Studio (5)**

Prereq: 351. Practical and experimental type design including type-setting, reproduction, and printing processes.

**353 Graphic Design: Junior Studio (5)**

Prereq: 352. The application of visual design concepts and principles. Projects in symbol design and design system applications.

**354 Media (5)**

Prereq: 8 hrs of graphic design or perm. Time, motion, light, and sound as design and communication tools. Problems in design with film, slides, overhead projection, sound track, and videotape.

**355 Film Animation (5)**

Prereq: FILM 361 or perm. Design problems in 16mm film animation. Basic methods and camera techniques.

**356 Illustration: Product (5)**

Prereq: 12 hrs drawing, 12 hrs 200-level studio art courses (incl ART 256), portfolio review, and perm. Illustration as visual statements that communicate specific ideas. Objects seen from a variety of viewpoints, stressing careful observation and analysis to give technically skilled and creative response. Color illustration techniques in gouache, airbrush, and color drawing media. Assignments include practical applications of illustration to page, poster, album, and book cover design.

**357 Illustration: Publication (5)**

Prereq: Art 356. Expands student's ability to translate verbal concepts into visual forms that enhance accompanying texts. Role of symbols and use of visual metaphors will be studied.

**360 Art for Elementary Teachers (6)**

Prereq: jr rank. To provide future elementary teacher with comprehensive understanding of nature of art materials and children's art work.

**370 Art Therapy: Theory and Research (5)**

Prereq: 271. Introduces students to the various psychological theories which influence the clinical practice of art therapy, especially those of Carl Jung and Jane Rhyne. An in-depth study of these two theorists will offer students an opportunity to contrast/compare ideas from two diverse orientations: a psychoanalytic background vs. humanistic psychology. Introduces students to the research component of art therapy and encourages critical thinking of its process, and provides experiential and written application of these ideas.

**371 Approaches to Art Therapy (5)**

Prereq: 271. Overview of various approaches to art therapy and their uses in different treatment settings. In-depth explanation of techniques and activities developed for each therapeutic approach.

**373 Developmental Art Therapy (5)**

Prereq: junior rank, PSY 101. Concepts of developmental psychology and art therapy and their application in art therapy to 1) teaching and intervention techniques, 2) structuring of activities, and 3) definition of developmental objectives for both normal and handicapped populations. Students will be assessing appropriate developmental objectives as these objectives relate to a developmental therapy model in art usage.

**375 Fibers (5)**

Prereq: 276 or perm. Introduction to 3-dimensional construction methods; basketry techniques, crochet, and weaving.

**376 Fibers (5)**

Prereq: 375. Fabric manipulation methods: designing with sewing, piecing, stitchery, quilting; surface design with resist-dye techniques (batik, ikat).

**387 Photo Illustration—Fashion (5)**

Prereq: portfolio review and perm. Investigation of tools and uses of applied photography in fashion photography.

**388 Photo Illustration—Product (5)**

Prereq: portfolio review and perm. Investigation of tools and uses of applied photography in product photography.

**389 Photo Illustration—Editorial (5)**

Prereq: portfolio review and perm. Investigation of tools and uses of applied photography in architectural and editorial illustration.

**391 Photographic Arts (5)**

Prereq: 297, portfolio review, and perm. Application of contemporary monochrome materials to selected range of problems within discipline.

**392 Photographic Arts (5)**

Prereq: 297, portfolio review, and perm. Application of series and sequential imagery to expression in photography.

**393 Photographic Arts (5)**

Prereq: 297, portfolio review and perm. Experimental methods and materials (gum bichromate, magazine lifts, photo-montage, quick-proof, 3 color overlays, Kodalith, and multiple printing).

**394 Advanced Color Printing (5)**

Prereq: 297 or portfolio review. Sensitometric control of color printing processes, dye transfer, color separation, and masking.

**397 Photographic Communication (5)**

Prereq: portfolio review and perm. Structured work in single image used for photographic communication in print media illustration and reportage.

**398 Photographic Communication (5)**

Prereq: portfolio review and perm. Structured work in use of multiple photographs to report, document, and tell stories in print media.

**399 Photographic Communication (5)**

Prereq: portfolio review and perm. Structured work in use of multiple color transparencies to produce narrative slide presentations.

**400 Seminar in the Visual Arts (3)**

Prereq: sr rank and perm. Interdisciplinary course designed to deal with professional issues beyond those pertinent to specific media, to enrich experience in various areas and professional levels, and to permit exchange of information on current issues in art world.

**401 Painting Practicum (3)**

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

**405 Painting (5)**

Prereq: 307. Advanced problems in painting.

**406 Painting (5)**

Prereq: 405. Continuation of 405.

**407 Painting (5)**

Prereq: 406. Continuation of 405-406.

**410 Ceramics Practicum (3)**

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

**415 Ceramics: Primitive Techniques (5)**

Prereq: 317. Special effects and limitations of raku, pit, wood, sawdust or saggar firing of wheel-thrown and handbuilt objects.

**416 Ceramics (5)**

Prereq: 415. Sr problems.

**417 Ceramics (5)**

Prereq: 416. Sr problems.

**428 Drawing (4)**

Prereq: 329 (not offered every qtr) Continuation of 329.

**429 Drawing (4)**

Prereq: 428. Continuation of 329 and 428.

**430 Sculpture Practicum (3)**

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

**433 Sculpture: Metals (5)**

Prereq: 333, 334 and perm. Advanced techniques in metal sculpture; emphasis on esthetic development; projects based on individual student interest.

**434 Sculpture: Fabrication (5)**

Prereq: 333, 334 and perm. 8 hrs sculpture. Continuation of 334.

**438 Sculpture (5)**

Prereq: 433, 434 and perm. Contemporary issues in sculpture.

**440 Prints Practicum (3)**

Senior presentation and portfolio.

**441 Prints (5)**

Prereq: 343. Emphasis on personal and professional development in printmaking.

**442 Prints (5)**

Prereq: 441. Continuation of 441.

**443 Prints (5)**

Prereq: 442. Continuation of 441-442.

**450 Design Practicum (3)**

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

**451 Graphic Design: Senior Studio (5)**

Prereq: 27 hrs of graphic design and perm. 2 and 3 dimensional graphic design with emphasis on professional and creative solutions. Problems in research and production.

**452 Graphic Design: Senior Studio (5)**

Prereq: 451 or perm. Design problems carried through all professional stages. Examination of design in context of various applications.

**453 Graphic Design: Senior Studio (5)**

Prereq: 452 or perm. Emphasis on individual problems and individual professional orientation. Portfolio preparation and presentation. Production of brochure and preparation of resume.

**456 Illustration: Senior Studio (5)**

Prereq: 357, portfolio review, and perm. Students required to complete series of portfolio-quality studies that focus on personal style and choice of media.

**457 Illustration: Senior Studio (5)**

Prereq: 456. Focuses on interpretation of information. Students required to illustrate variety of articles of both fact and fiction.

**458 Illustration: Senior Studio (5)**

Prereq: 457. Focuses on student's selection of specialized area of publication. Interpretation of information, stylistic development, and technical facility stressed.

**461 Art Experiences in the Elementary School (3)**

Prereq: EDSE 351. Emphasizes importance of art in elementary school curriculum. Traces evolution of children's symbols from scribble to realistic representation. Teaching strategies, art materials, appropriate art processes. Field experiences and text.

**462 Art Teaching in the Secondary School (3)**

Prereq: 461. Prepares student for realities of secondary school art program environment—physical and intellectual as well as emotional. Develops positive, constructive attitudes and knowledgeable teaching skills. Field experiences and text.

**470 Practicum in Art Therapy (3)**

Prereq: 271, 371. Observing and keeping weekly logs from 3 to 5 sites in Athens where handicapped clients receive professional care. Weekly seminar to review student's observational time and discuss application of art therapy to each site.

**471 Field Experience in Art Therapy I (5)**

Prereq: 271, 371, and 470. Providing art therapy itinerant services to agency for handicapped clients under direct supervision of ATR (Ohio University staff) and site personnel.

**472 Field Experience in Art Therapy II (5)**

Prereq: 471. Continuation of 471.

**475 Fibers (5)**

Prereq: 376. Individually designed on- or off-loom projects.

**476 Fibers (5)**

Prereq: 475 or perm. Continuation of 475.

**480 Individual Problems (1-5, max 5)**

Prereq: sr. rank and perm. Projects, ideas, or explorations that cannot reasonably be made within regular course structures. Requires perm of faculty member prior to registration. Credit as elective only.

**481 Individual Readings (1-5, max 5)**

Prereq: sr. rank and perm. Reading and research related to studio work. For projects not reasonably part of structure of regular studio courses. Requires perm of faculty member prior to registration. Credit as elective only.

**490 Photography Practicum (3)**

Prereq: sr rank and perm. Critical review of portfolio, preparation of resume, and training for interview.

**491 Advanced Photographic Arts (5)**

Prereq: 393, portfolio review, and perm. Individual problems and seminars.

**492 Advanced Photographic Arts (5)**

Prereq: portfolio review and perm. Individual problems and seminars.

**493 Advanced Photographic Arts (5)**

Prereq: portfolio review and perm. Individual problems and seminars.

**494 Advanced Publications Photography (5)**

Prereq: perm. Advanced work in photographic communication, principally newspaper picture story.

**495 Advanced Publications Photography (5)**

Prereq: portfolio review. Advanced picture story, essay, and editorial illustration production problems in magazine photographic work.

**496 Advanced Publications Photography (5)**

Prereq: portfolio review and perm. Advanced slide show production requiring multiple projectors, computer controlled programming, and audio production.

## ART HISTORY

**211 History of Art (4)****(2H)**

Survey of western painting, sculpture, and architecture from prehistoric to Early Christian. Students advised but not required to enroll in 211, 212, and 213 in sequence.

**212 History of Art (4)****(2H)**

Continuation of 211 from Early Christian period of Europe through Renaissance. Students advised but not required to enroll in 211, 212, and 213 in sequence.

**213 History of Art (4)****(2H)**

Continuation of 212 from Baroque to present. Students advised but not required to enroll in 211, 212, and 213 in sequence.

**307 History of Photography (4)**

Prereq: jr rank or perm. Historical development of photography from its inception to present including comprehensive study of artistic and technical developments and of major photographers and movements.

**308 History of Photography (4)**

Prereq: 307. Continuation of 307.

**309 History of Photography (4)**

Prereq: 308. Continuation of 307-308.

**320 Greek Art (4)**

Prereq: jr rank or perm. Art of ancient Greece.

**321 Roman Art (4)**

Prereq: jr rank or perm. Art of ancient Rome.

**322 Medieval Art (4)**

Prereq: jr rank or perm. Art of Europe from age of Constantine to art of Giotto.

**323 Italian Renaissance Art (4)**

Prereq: jr rank or perm. Art of 15th-century Italy.

**324 Northern Renaissance Art (4)**

Prereq: jr rank or perm. Art of Northern Europe in 15th and 16th centuries.

**325 Art of High Renaissance and Mannerism (4)**

Prereq: jr rank or perm. Art of 16th-century Italy.

**326 Baroque and Rococo Art (4)**

Prereq: jr rank or perm. Art of 17th- and 18th-century Europe.

**327 Art of the Nineteenth Century (4)**

Prereq: jr rank or perm. European painting and sculpture from French Revolution through Symbolism.

**328 Modern Art (4)**

Prereq: jr rank or perm. Art of Europe from 1880 to 1945.

**329 The Arts of the United States (4)**

Prereq: jr rank or perm. Art in U.S. from Colonial period to 1865.

**330 The Arts of the Orient (4)****(2T)**

Prereq: jr rank or perm. Art of India, China, and Japan.

**331 Pre-Columbian Art (4) (2T)**  
Prereq: jr rank or perm. Preconquest art of Mexico, Central and South America.

**332 West African Art (4)**  
Prereq: jr rank or perm. The visual art traditions, including sculpture, ceramics, textiles, and architecture, of the forest and savanna zones of West Africa.

**333 Central African Art (4)**  
Prereq: jr rank or perm. The visual art traditions, including sculpture, ceramics, textiles, and architecture, of the forest and savanna zones of Central Africa.

**334 Ancient Near Eastern Art (4)**  
Prereq: jr rank or perm. Motifs and monuments of Egypt, Mesopotamia, Assyria, and Babylonia.

**335 Art Since 1945 (4)**  
Prereq: jr rank or perm. Selected studies in visual arts covering developments after 1945, such as Abstract Expressionism, Minimalism, Pop, Post-Modernism, performance, video, electrostatics, etc., to the present. This is a lecture course.

**340 Selected Topics in Art History (4)**  
Prereq: jr rank or perm. Selected problems in the visual arts, such as interdisciplinary topics, cross-cultural studies, thematic treatments, technical investigations, and approaches to material. Content may vary with each offering of this course.

**350 Principles of Architecture (4)**  
Introduction to styles, theories, and structural principles of architecture.

**351 Ancient Architecture (4)**  
Prereq: soph. and above. Survey of architectural monuments and their historical settings in Near East, Egypt, Greece, and Rome.

**352 Medieval Architecture (4)**  
Prereq: soph. and above. Survey of architectural monuments and their historical setting in early Christian, Byzantine, Romanesque, and Gothic periods.

**353 Renaissance and Baroque Architecture (4)**  
Prereq: soph. and above. Survey of architects and monuments from 15th through 18th century.

**354 19th and 20th Century Architecture (4)**  
Prereq: soph. and above. Survey of architects and monuments from historical revival styles through recent stylistic trends.

**360 Seminar in Art Historiography (4)**  
Prereq: perm. Investigation of various methodological approaches to study of art.

**480 Individual Problems (1-6, max 6)**  
Prereq: perm. Projects, ideas, or explorations that cannot reasonably be made within regular course structures. Requires perm of faculty member prior to registration. Credit as elective only.

**481 Individual Readings (1-6, max 6)**  
Prereq: perm. Reading and research in art history, which cannot reasonably be made within regular course structure. Requires perm of faculty member prior to registration. Credit as elective only.

## ASTRONOMY

See Physics and Astronomy.

## AVIATION

Due to changes in economic conditions, it may be necessary to adjust the special fees for flight courses. Current information can be found in the *Schedule of Classes*.

**110 Private Pilot Ground Instruction (4)**  
40 hrs ground instruction covering radio navigation, meteorology, FAA regulations, communications, aircraft construction, and performance data to meet requirements of private pilot's written exam. 2 lec.

**240 Private Pilot Flight Course (4)**  
Prereq: FAA written passed or perm. 43½ hrs flight training and related lectures including primary flight maneuvers and cross-country flying. Meets requirements for private pilot's certificate. 1 lec, 3 lab. Course fee \$2,300.

**240A Introduction to Flight (2)**  
Prereq: 110 and perm. 14 hrs of dual and solo flight instruction in fundamentals of flight. Meets AFROTC curriculum requirements. Course fee \$700.

**240B Introduction to Flight II (1)**  
Prereq: 240A and perm. 14 hrs of dual and solo flight instruction. Introduction to cross-country navigation and use of radio aids to navigation. Course fee \$740. Two hours simulator.

**240C Introduction to Flight III (1)**  
Prereq: 240B and perm. 14 hrs of dual and solo flight instruction in cross-country navigation by pilotage, dead reckoning, and use of VOR, NDB, RNAV, and HSI. Flight test preparation for private pilot certification included. Course fee \$755.

**300 Aviation Laws and Regulations (3)**  
Obtains knowledge, background, and understanding of aviation laws and regulations. Emphasis will be placed upon areas of legal concepts of operation, contracts, insurance and liability, regulatory statutes, and case law. In addition, various regulations of FAA, DOT, NTSB, and ICAO will be covered. Offered one quarter each academic year. 2 lec.

**310 Advanced Aeronautics for Commercial Pilot Ground Instruction (4)**  
Prereq: private pilot's certificate or perm. 40 hr ground instruction covering advanced aerodynamics, radio navigation, FAA regulations, aircraft construction and performance, theories of flight, weight and balance, and instruments to meet requirements of commercial written exam. Offered one quarter each academic year. 2 lec.

**320 Advanced Aircraft Systems (2)**  
Prereq: private pilot's certificate. In-depth study of simple and complex aircraft fuel, electrical, hydraulic, and environmental systems. Subjects to be covered will be pertinent information from the FAR's, AIM, NTSB Part 830. Offered one quarter each academic year. 1 lec.

**340 Commercial Flight Course, Part I (4)**  
Prereq: private pilot's certificate. 40 hrs flight training consisting mainly of cross-country. 3 lab. Course fee \$2,000.

**343 Commercial Flight Course, Part II (4)**  
Prereq: private pilot's certificate and 340 or perm. 41 hrs flight training consisting mainly of solo cross-country to build flying time toward higher rating. 7 hrs complex airplane time included. 3 lab. Course fee \$2,400.

**350 Instrument Ground Instruction and Air Traffic Control (4)**  
Prereq: private pilot certificate and perm. 40 hrs of ground instruction covering various navigation systems and procedures, aircraft radios and communications, instrument flying, and air traffic control procedures. Includes functions of ATC centers, approach control, towers, and flight service stations. FAA regulations included. Meets all requirements for instrument pilot written exam. Offered every other quarter. 2 lec.

**360 The National Airspace System (3)**  
Knowledge, background, and understanding of the Federal Aviation Administration's comprehensive plan for modernizing and improving air traffic control and airway facilities services from now to the year 2000. Specific areas to be addressed include air traffic services, flight service stations, ground-to-air services, and maintenance. Offered one quarter each academic year. 2 lec.

**390 The Air Transportation Industry (3)**  
Prereq: MGT 200 or above or perm. To give a broad understanding of the air transportation industry and the major management functions with an airline. Topics cover economics of airlines; managerial aspects; international aviation; career planning; and general aviation.

**400 Commercial Flight Course, Part III (4)**  
Prereq: FAA written passed or perm. 37 hrs of instruction of flight by sole reference to instruments. 3 lab. Course fee \$2,200.

**410 Fundamentals of Aviation for Teachers (4)**  
Prereq: 110 or perm. Comprehensive course covering aeronautical knowledge required of private pilot: navigation, weather, federal



regulations, theory of flight, aircraft performance, radio communications and navigation, and fundamentals of instruction for teachers of aviation ground instruction courses.

#### 415 Instrument Simulator Proficiency Course (2)

Prereq: Instrument Rating. Provides comprehensive review of instrument procedures, publications, regulations, weather analysis, aircraft performance, planning, and emergency procedures for instrument-related pilot who wishes to regain instrument proficiency. 10 lessons require minimum of 15 hrs ground instruction review and 20 hrs simulator practice. Course fee \$1,080.

#### 420 Commercial Flight Course, Part IV (4)

Prereq: FAA written passed or perm. 35 hrs of flight instruction including 10 hrs in complex airplane. 3 lab. Course fee \$2,600.

#### 425 Commercial Flight IV (Multi-Engine Option) (6)

Prereq: FAA written passed, perm. 42 hrs of dual and solo flight instruction with 11 hrs of instruction in multi-engine aircraft to meet experience requirements for commercial pilot certificate with single and multi-engine ratings. Course fee \$3,800.

#### 430 Multi-Engine Flight Course (2)

Prereq: pilot's certificate and perm. 10 hrs of procedures with both engines operative, with 1 engine inoperative (feathered), single engine speeds, effects of airplane configuration on engine-out performance. Enroute operations, single engine approaches and landings. 2 lab. Course fee \$1,960.

#### 435 Flight Engineer (4)

Prereq: Commercial Certificate, Multi-Engine Instrument. Comprehensive course covering aeronautical knowledge acquired for the flight engineer rating, including federal aviation regulation, aerodynamics, meteorology, aircraft manuals, and aircraft systems.

#### 440 Flight Instructor Ground Instruction (4)

Prereq: commercial pilot's certificate or perm. 40 hrs ground instruction on FAA regulations and publications, weather, advanced flight computer operations, radio navigation, advanced aircraft and engine performance, and fundamentals of instructing. Covers requirements for flight instructor written exams. Offered once a year. 2 lec.

#### 445 Flight Instructor Course (3)

Prereq: FAA written passed, commercial pilot's certificate and perm. 20 hrs review of commercial course with emphasis on how to instruct and analysis of maneuvers. 3 lab. Course fee \$1,600.

#### 450 Instrument Instructor Ground Instruction (3)

Prereq: commercial certificate. 30 hrs review of instrument course with emphasis on how to instruct instrument flying. Covers requirements for instrument written exam. 2 lec.

#### 455 Instrument Instructor Flight Course (3)

Prereq: FAA written passed, commercial certificate. 20 hrs of review of instrument course with emphasis on how to instruct on instruments. 3 lab. Course fee \$1,300.

#### 460 ATP Ground Instruction (4)

Prereq: FAR 61.153. Forty hrs advanced course placing major emphasis on specific requirements and duties of airline transport pilots in accordance with Federal Aviation Regulations. Provides aeronautical requirements for airline transport pilot written exam. 2 lec.

#### 465 Flight Instructor Operations — Multi-Engine (2)

Prereq: flight instructor certificate with multi-engine rating and perm. 5 hrs flight instruction in multi-engine operations and instructional practices, analysis of maneuvers, and practice teaching of multi-engine procedures; plus 1 hr lec/disc per wk. Course fee \$1,350.

#### 470 ATP Flight Course (2)

Prereq: perm. 15 hrs taking practical and operational approach to problems that arise in planning and conducting air transport operations. 3 lab. Course fee \$3,000.

#### 475 Internship in Aviation Operations (1-15)

Prereq: perm. Internship program in selected fields of aviation under direction of faculty member. Specific fields could be: (1) serving as intern in commercial flight operation as copilot or as flight instructor; (2) serving as intern in airport operation as assistant to airport manager; or (3) special service flying such as medical supplies, fire-fighting, cloud seeding, FAA observers, etc.

## BACTERIOLOGY

See Zoological and Biomedical Sciences.

## BIOLOGY

See Botany or Zoological and Biomedical Sciences.

## BLACK STUDIES

See Afro-American Studies.

## BOTANY

For students interested in careers in botany, plant pathology, biotechnology, environmental biology, natural resources, conservation, forestry, field biology, agronomy, horticulture, plant breeding, landscaping, freshwater and marine biology, cell biology, or agribusiness, the Department of Botany offers major programs in the following specializations: botany (major code 2111); preforestry (major code 2112); environmental biology-botany emphasis (major code 2113); applied plant sciences (major code 2114); field biology (major code 2115); advanced training in botany (major code 2116); agri-business (major code 2117); and cell biology and biotechnology (major code 2118). For further information relating to these programs and suggested curricula, please see Special Curricula under the College of Arts and Sciences section in this catalog. The requirements for the botany major, both A.B. and B.S., are given below.

For a B.S. degree with a major in botany the student must complete a minimum of 50 credit hours in BOT courses including 110, 111, 404, and a minimum of two courses from each of the following three areas. Area a: 331, 412, 424, 427, 431, 450, 453. Area b: 309, 425, 426, 475. Area c: 307, 308, 310, 312, 420, 460. Additional courses to complete the 50 credit hour requirement may be selected from areas a, b, and c, or other BOT courses numbered above 200 listed in this catalog, with the exception of those courses designed for nonbotany majors. The following nondepartmental courses also are required: CHEM 151, 152, 153, 301, 302; ZOOL 171, 173, 325 (if 331 not completed in Area a); PHYS 201, 202, 203; MATH 163A, 163B; and one course from the following: MATH 250B, PSY 121, CS 220, 230, 322.

The A.B. degree in botany is designed for the student interested in the plant sciences but who desires a broad, liberal education. Many students may find that the flexibility in this program allows for either a minor or second major in another discipline such as economics, business administration, computer science, anthropology, sociology, geography, geological sciences, microbiology, zoology, etc. Students who plan to do graduate studies in botany or one of the related biological sciences should consult a departmental advisor for assistance in selecting a program that is designed for preparation for advanced degrees. For an A.B. degree with a major in botany the student must complete a minimum of 40 credit hours in BOT courses including 110, 111, and two courses from each of the following three areas: Area a: 331, 412, 424, 427, 431, 450, 453. Area b: 309, 425, 426, 475. Area c: 307, 308, 310, 312, 420, 460. The following nondepartmental courses also are required: CHEM 121, 122, 123; ZOOL 171, 173, 325 (if 331 not completed in Area a); and either (select one from the following) MATH 163A, MATH 250B, CS 220, CS 230, CS 322, or PSY 121.

In addition to major programs, the Department of Botany offers a minor. Requirements for the minor in botany consist of a minimum of 28 credit hours of coursework in botany, including BOT 110 and 111, and at least two courses at the 300 level or above.

#### 100 The World of Plants (4)

(fall, spring) For nonscience majors with little or no previous experience with biological sciences. Survey of variety of plants, and how they affect and are affected by humans. 4 lec.

(2N)

**100L The World of Plants with Laboratory (5) (2N)**  
(fall, spring) Same lecture as 100 with additional laboratory to provide practical experience with plants and topics discussed in lecture. 4 lec, 2 lab.

**101 Principles of Biology (5) (2N)**  
For nonscience majors. Principles of cell biology, physiology, ecology, genetics, and evolution. (Same as ZOOL 101.) Credit not allowed for both 101 and 110 or ZOOL 101 or ZOOL 170. 4 lec, 2 lab.

**102 Plant Biology (5) (2N)**  
(fall, winter) For nonscience majors. Structure of seed plants as related to function. Survey of plants, with emphasis on life histories, reproduction, and relationships of selected plant groups. Credit not allowed for both 102 and 111. 4 lec, 2 lab.

**103 Plants and People (4) (2A)**  
Interrelationships of plants and humans from both historical and modern points of view, origins of agriculture and civilization, tropical and temperate food plants, medicinal plants, drug plants, destruction of environment, and its ultimate effect on food plants. 3 lec, 1 disc.

**110 Introduction to Botany (6) (2N)**  
(fall, winter) *J. Mitchell*. For botany and other science majors, preprofessional students, and science modular students. Introduction to fundamental biological principles as they affect plant science. Reproduction of plants and cells, structure and function of cells and cell organelles, classical and molecular genetics, plant growth and development, evolution and ecology. Credit not allowed for both 110 and 101 or ZOOL 101 or ZOOL 170. 4 lec, 4 lab.

**111 Introduction to Botany (6) (2N)**  
Prereq: 110 or ZOOL 170 or perm. (winter, spring) *J. Graffius*. For botany and other science majors, preprofessional students, and science modular students. Survey of plants, with emphasis on systematics, evolutionary relationships, life histories, and reproduction of representative plant groups; introduction to morphology and anatomy of vascular and nonvascular plants. Credit not allowed for both 102 and 111. 4 lec, 4 lab.

**160 Applied Plant Sciences and Technology (4) (2A)**  
*N. Cohn, J. Mitchell*. For nonscience majors. Study of technology for generation of plants and plant products that contribute to functioning of society, impact which these activities have on world economy and environment, and research efforts aimed at improving contribution of plants through breeding or current genetic engineering techniques. 4 lec.

**220 Woody Plants (4)**  
(fall) *J. Graffius*. Designed for nonbotany majors. Introduction to identification of local woody plants, and to the use of keys in plant identification. Credit not allowed if 248 completed. 2 lec, 4 lab.

**225 Flowers (4)**  
(spring) Designed for nonbotany majors. Identification of local flowers and discussion of the role of flowers in their natural environments. Credit not allowed if 309 completed. 2 lec, 4 lab.

**247 Vegetation of North America (4)**  
Prereq: 1 course biological science or perm. (winter) *I. Ungar*. Illustrated lecture course considering extensive plant formations with relationship to climate, soil, geographic formations, and influence of humans. 4 lec.

**248 Trees and Shrubs (Dendrology) (4)**  
Prereq: 111 or 102. (fall) *P. Cantino*. Collection, identification, nomenclature, classification, ecological relationships, and importance to humans of native and introduced woody plants. 2 lec, 4 lab, supplementary field trips.

**297T Botany Tutorial (1-15)**  
Prereq: Tutorial college and perm. (fall)

**298T Botany Tutorial (1-15)**  
Prereq: Tutorial college and perm. (winter)

**299T Botany Tutorial (1-15)**  
Prereq: Tutorial college and perm. (spring)

**303 Medicinal Plants of Ohio (3)**  
(summer) *J. Cavender*. Summer workshop. Identification, history, and uses of medicinal plants; characteristics of herb families; preparation of simple herbal remedies. Field trips to conifer woods, flood plain, cove forest, swamp, and commercial herb-growing establishment. 3 lec.

**307 Morphology of Algae and Bryophytes (6)**  
Prereq: 111 or 102. (spring, odd years) *J. Graffius*. Comparative studies of structure, evolutionary relationships, life histories, and reproduction of selected representatives of major groups of algae and bryophytes. 4 lec, 4 lab.

**308 Morphology of Vascular Plants (6)**  
Prereq: 111 or, with perm. 102. (winter) *G. Rothwell*. Diversity of vascular plants as reflected by structural, developmental, and reproductive features of major groups; emphasis on evolution of diversity through systematically significant adaptations. 3 lec, 6 lab.

**309 Plant Systematics and Ohio Flora (6)**  
Prereq: 111 or 102. (spring) *R. Lloyd, P. Cantino*. Principles and methods of systematics and taxonomy: classification, floral biology, and evolution of flowering plants. Lab: identification and classification of spring flora. 3 lec, 6 lab, field trips.

**310 Biology of Fungi (5)**  
Prereq: 111 or 102. (fall) *J. Cavender*. Morphology and life history studies of selected fungi of major groups; collection, isolation, and growth of selected fungi; fungal activities. 3 lec, 4 lab.

**311 Biology and Human Affairs (4)**  
Prereq: 1 course biological science, or perm. (winter) *J. Cavender*. Discussions of impact of modern biological science upon human problems in biological, social, moral, and political areas. No credit toward major. 4 lec.

**312 Plant Anatomy (5)**  
Prereq: 111 or, with perm. 102. (fall) *G. Rothwell*. Structure, development, and systematic anatomy of vascular plants. 3 lec, 4 lab.

**313 Special Topics in Botany (1-6)**  
Prereq: perm. Current and/or special topics in botany.

**313B Supervised Study (1-3)**  
Prereq: botany majors and perm.

**331 Plant Genetics (5)**  
Prereq: 111 or 102. (winter, odd years) Basic principles of genetics as they relate to plants, including transmission, expression, and evolution of genetic materials. 5 lec.

**360 Field Experience in Elementary or Secondary Schools, or Equivalent (2)**  
Prereq: jr rank and perm. (winter) *J. Braselton*. Observation and participation in elementary and secondary schools, or the equivalent. Approval must be secured from the Botany 368 instructor prior to enrollment. Concurrent registration in Botany 360 and 368 suggested. May be repeated. 4 lab.

**368 Teaching of Biology (4)**  
Prereq: 18 hrs biological sciences. (winter) *J. Braselton*. Discussion, demonstration, and practice of goals and skills in biological teaching. Written and verbal evaluation and criticism of journals, texts, and A-V programs. Analysis and criticism of lab experiments. 2 lec, 4 lab.

**397T Botany Tutorial (1-15)**  
Prereq: Tutorial college and perm. (fall)

**398T Botany Tutorial (1-15)**  
Prereq: Tutorial college and perm. (winter)

**399T Botany Tutorial (1-15)**  
Prereq: Tutorial college and perm. (spring)

**404 Undergraduate Research (2-6)**  
Prereq: 24 hrs botany and perm. Independent research under supervision of faculty member.

**410 Plants and Soil (4)**  
Prereq: 111 or 102; 2 qtrs chemistry. (winter, even years) *J. Cavender*. Soil as environment for plant growth; interrelationships between plant and soil; role of soil organisms in cyclic processes; building and maintenance of soil fertility; relationships between soil and health of plants, animals, and humans. 3 lec, 2 lab.

**412 Plant Pathology (5)**  
Prereq: jr or sr majors in biological sciences. (spring, odd years) *A. Trese*. Diseases of plants; history, types of pathogens and disease cycles, impact in nature and agriculture, disease control strategies. Isolation and identification of pathogens. 3 lec, 4 lab.

**420 Freshwater Algae (5)**

Prereq: 111 or, with perm, 102. (spring, even years) *J. Graffius*. Taxonomy and ecology of freshwater algae, with emphasis on identification and distribution of common or representative genera. 3 lec, 4 lab.

**424 Plant Physiology (6)**

Prereq: 111 or 102; organic chemistry recommended. (winter) *I. Smith*. Basic chemical and physical aspects of plant processes; photosynthesis, respiration, mineral nutrition, transport, nitrogen metabolism, water relations, and growth. 3 lec, 6 lab.

**425 Plant Ecology (5)**

Prereq: jr or sr rank. (fall) *I. Ungar*. Effect of environmental factors as related to structure and function of plant communities. 3 lec, 4 lab, 1 Saturday field trip.

**426 Physiological Plant Ecology (5)**

Prereq: 425 or perm. (spring) *I. Ungar*. Analysis and interpretation of ecological problems. 3 lec, 4 lab, 1 Saturday field trip.

**427 Molecular Genetics (3)**

Prereq: 331 or 431 or ZOOL 325; organic chemistry. (spring, even years) *N. Cohn, A. Showalter*. Genetic fine structure and function at the molecular level; biochemical aspects of heredity in microorganisms, plants, and animals; recombinant DNA and genetic engineering. Same as ZOOL 427. 3 lec.

**431 Cell Biology (5)**

Prereq: 111 or ZOOL 171, 173. (fall) *J. Braselton, N. Cohn, J. Mitchell*. Structure and function of cells, organelles, and cellular inclusions. 3 lec, 4 lab.

**432 Microtechnique (5)**

Prereq: sr rank and perm. (upon sufficient demand) *J. Braselton*. Preparation of plant tissues for microscopic study. 6 lab.

**450 Biotechnology and Genetic Engineering (4)**

Prereq: 110 or ZOOL 170, or perm. (spring, odd years) *A. Showalter*. For upper level undergraduate students. Introduction to basic molecular biological concepts and techniques in biotechnology and genetic engineering, including discussion of current experimentation and progress in these fields. 4 lec.

**453 Developmental Physiology (4)**

Prereq: BOT 111. (spring, even years) *J. Mitchell*. Growth and development in flowering plants. Topics include cell growth and differentiation in developing meristems; tissue and organ development in culture; dormancy and germination; flower induction; seed formation; growth regulators; and senescence. 4 lec.

**460 Paleobotany (6)**

Prereq: perm. (spring, alternate years) *G. Rothwell*. Morphology and evolution of representative fossil plant groups. 3 lec, 6 lab.

**475 Plant Speciation and Evolution (3)**

Prereq: jr or sr majors in biological sciences. (winter) *R. Lloyd*. Discussion of the principles of evolution of plants and current topics in evolutionary biology. 3 lec.

**497T Botany Tutorial (1-15)**

Prereq: Tutorial college and perm. (fall)

**498T Botany Tutorial (1-15)**

Prereq: Tutorial college and perm. (winter)

**499T Botany Tutorial (1-15)**

Prereq: Tutorial college and perm. (spring)

## BUSINESS ADMINISTRATION

**101 Business and Its Environment (4)**

Nature of business and of economic, social, and political environments of business firm. Emphasis on ways in which such surroundings affect business policies and operations.

**111 History of American Business (4)**

Origins and development of American business, emphasizing interrelations among business, economy, society, and polity.

**301 Business and Its Environment (4)**

Prereq: jr or sr rank (not open to those with credit for 101). Nature of business and of economic, social, and political environments of the

business firm. Emphasis on ways such surroundings affect business policies and operations.

**385 Multinational Business (4)**

Prereq: jr rank. Study of emergence of U.S. and non-U.S. multinational corporations, scope of their operations, and their impact on U.S. economy and consumer.

**431 Administration of Information Systems (4)**

Prereq: sr rank or perm. Information networks and flows in organizations within total systems framework.

**445 Small Business Administration (4)**

Prereq: BA 310; BUSL 255; FIN 325; MGT 300; 325J; MKT 301. Place and role of small business firms; problems they face; opportunities involved and competitive considerations.

**455 Studies in Business History (4)**

Prereq: jr or sr rank and perm. Case studies of American business figures and firms since early colonial period, with emphasis on 20th century. Lessons from past examined in relation to present sound business policy.

**465 Technology and the Environment (4)**

Prereq: jr or sr rank and perm. Course is conceptual, interdisciplinary, and future-oriented. Variety of developmental problems and interaction of many technological environments including economic, sociopolitical, and market environments.

**470 Administrative Policy (4)**

Prereq: jr rank in CBA, and all CBA core courses. Integrated application of core studies to nature, functions, and activities of actual business, analyzing objectives, policies and performance — all in relation to outside environment.

**480 Ethics and Morality in Business (4)**

Prereq: jr or sr rank and perm. Combined moral philosophy and personal responsibilities in business; critical analysis of contextual situation where provisional resolutions must be indirectly charted between ethical oughts and economic musts.

**497 Independent Research (1-4)**

Prereq: perm. Research in selected fields of business administration under direction of faculty member.

**498 Internship (1-4)**

Prereq: perm.

## BUSINESS LAW

**255 Law and Society (4)**

Prereq: soph rank. Conceptual approach to origin, nature, structure, functions, and procedures of law with study of contractual relationships. Administrative and governmental process with attention given to antitrust and role of government and consumer interests in our legal system.

**356 Law of the Management Process (4)**

Prereq: 255. Conceptual framework of legal nature of organizations, particularly corporations and partnerships; rights, powers, and limits of managers in relation to duties and responsibilities to their organizations, owners, creditors, employees, customers, state, and public.

**357 Law of Commercial Transactions (4)**

Prereq: 255. Legal aspects of commercial paper, consumer credit, and bankruptcy.

**360 Law of Health Care (4)**

Prereq: jr rank or perm. Analysis of public-private constraints in foundation health agencies; experimentation and risk assumption; medical records; hospital liability; and governmental regulations.

**370 Environmental Law (4)**

Prereq: jr rank or perm. Legal aspects of both individual environmental and societal environmental rights and duties with respect to constitution, private property, nuisance, negligence, statutes, regulatory agencies, and court decisions. Emphasis upon case study of federal, state, and local laws which shaped existing law and those which are likely to shape future legislative and administrative action.

**442 Law of Property and Real Estate (4)**

Prereq: 255 or perm. Property law as an institution and analysis of creation, transfer, and relation of various legal interests in property, especially land.

**462 Law of Estates and Trusts (4)**

Prereq: 255 or perm. Law as it pertains to decedents' estates including law of wills, intestate succession, and trusts.

**465 Law of Sports (4)**

Prereq: perm. Regulations of amateur athletics, public regulation of sports activities, legal relationships in professional sports, enforcement of professional sports contract, liability for injuries, and antitrust aspects of sports activities.

**475 Government and Business (4)**

Prereq: 255 or perm. Governmental regulatory environment of business including analysis of statutes, court decisions, and rulings affecting policy decisions.

**491 Seminar (3, 4, or 5)**

Prereq: 255 or perm. Selected topics of current interest in business law area.

**497 Independent Research (1-5)**

Prereq: perm. Research in selected fields of business law under direction of faculty member.

**498 Internship (1-4)**

Prereq: perm.

## BUSINESS MANAGEMENT TECHNOLOGY

The following courses for the A.A.B. degree program in business management technology (BMT) are available on the Chillicothe and Lancaster campuses. These courses are not open to College of Business Administration students.

**110 Introduction to Management (4)**

Nature of managerial concepts, managerial functions, and organizational structure, with emphasis on current issues.

**120 Mathematics in Business (4)**

Application of basic math to business problems. Special emphasis on compound interest, installment buying, and depreciation. Elementary applications of probabilities and statistics. Introduction to computer programs commonly used in business math applications.

**140 Concepts of Marketing (4)**

Introduction to problems of manufacturers, wholesalers, and retailers as they relate to modern marketing, market, and product.

**150 Elements of Supervision (3)**

Concepts of modern-day supervision. Emphasis on supervisor's major functions and development of sensitivity to human facets in management, using behavioral science findings.

**170 Small Business Operations (3)**

Includes preparation of student for selection and operation of small business. Balanced program of all major aspects confronting small business operator, including finance, personnel, sales, and success and failure factors.

**189 Independent Study (1-5)**

Projects concerning business technology explored with instructor on 1-to-1 basis. Studies selected in subject areas in business field. May be repeated up to 5 credit hrs.

**200 Introduction to Business Computing (4)**

Computer applications used in business and industry. Students do computer assignments utilizing BASIC and an integrated business program such as LOTUS 1-2-3 and Wordperfect programs, as well as readings in computer science.

**203 Business Career Profiles (3)**

Practical approach to better understanding by students of what is expected of them by management and what they can expect from management on any job or in any working situation by achieving a better grasp of the various activities and institutions found in the business community.

**210 Managing Finance in Business (4)**

Prereq: ATCH 103 and 104. Introduction to basic concepts, principles, and analytical techniques of financing. Emphasis on planning and managing assets.

**220 Concepts of Purchasing Management (4)**

Analysis of purchasing operation's structure and procedure. Descriptions of quality, quantity, value analysis, sources of supply, and procurement controls. Vendor/buyer relationships, make-or-buy decisions, inventory control, buyer training, materials handling, records, and budgets.

**230 Concepts of Sales (3)**

Policies and procedures pertaining to planning sales effort, and control of sales operations. Personality development and role of selling in society, careers, and psychology and philosophy as related to selling.

**240 Concepts of Audience Analysis (3)**

Development of knowledge of behavior content of marketing in consumer fields. Examination of applicable theory and research findings and concepts provided by psychology, sociology, anthropology, and marketing. Stress on conceptual models of buyer behavior based on sources of influence.

**250 Practical Personnel Procedures (3)**

Hiring, training, assignment of work, employee counseling, promotion, wage and salary administration. Leadership, motivation, and direction of employees toward management/employee-oriented goals.

**260 Business Report Writing (4)**

Practice in planning and writing effective business letters, memoranda, and reports.

**270 Advertising Concepts (3)**

General course in advertising which emphasizes psychology, advertising agency, media research, brands, and labels.

**275 Managerial Planning (4)**

Prereq: 210. In-depth coverage of the planning process with emphasis on strategic planning. The case study approach is employed to develop skill in complex and difficult decision making. Applications in management science to assist in the decision process are covered.

**280 Concepts of Labor and Management Relations (4)**

Prereq: ECON 103. A broad overview of micro and macroeconomic theory as applied to the labor factor of production; the many problems related to the full utilization of human resources and government policies addressing these problems; the effects of unionism and labor-management relations including collective bargaining.

**285 Government and Business (3)**

Business and government relations, with emphasis on analysis of selected areas involving public policy and business.

**288 Computer Applications for Management (4)**

Prereq: 275. Utilizes integrated software package skills acquired in 200 and in comprehensive case-studies approach in business. Spreadsheet, data base management, word processing, and graphics applications used to create comprehensive business report that ties together overall curriculum.

**289 Special Topics (1-5)**

Advanced projects concerning business technology explored with instructor on 1-to-1 basis. For advanced students only. May be repeated to 5 credit hrs.

## CHEMISTRY

A student who completes the requirements for the B.S. degree with a major in chemistry is eligible for professional status in the American Chemical Society in the minimum period of two years of professional experience after graduation. Completion of the minimum requirements for the A.B. degree with a major in chemistry does not qualify a student for certification to the society.

Students who wish to obtain state certification to teach high school chemistry may do so by completing the A.B. or B.S. degree programs, described in the following sections. To do so also requires completion of professional education and general education

courses, as described in the College of Education section of this catalog. Students pursuing this option not only need to maintain contact with their Department of Chemistry advisors, but also need to obtain further information concerning certification requirements from the College of Education, 124 McCracken Hall. Students also may attain certification to teach high school chemistry through B.S.Ed. programs with a major or minor in chemistry as described in the College of Education section of this catalog.

Students having foreign language requirements should take German or Russian. Those anticipating graduate study should be aware that graduate schools generally require a reading knowledge of one or more foreign languages; German and/or Russian is recommended. Details of the M.S. and Ph.D. programs are given in the Graduate Catalog.

All chemistry laboratory courses will require a \$20 breakage and supplies card, the unused portion of which will be refunded.

Completion of the A.B. or B.S. degree requirements automatically completes the requirement of the College of Arts and Sciences for at least nine hours in the major at the junior-senior level.

## Chemistry Major

(Major code #3311)

The major requirement for the B.S. degree includes the following: 151-152-153; 241-242; 305-306-307-308-309, 400A-B; 453-454-455; 456-457; 476; 431-432-433-434-435-436, a course in biochemistry (489 or the full sequence 490-491-492). Extradepartmental requirements include MATH 263A-B-C-D and PHYS 251-252-253, which should be completed by the end of the second year. ENG 151 and 305J are also recommended to meet English composition requirements. The B.S. degree program is chosen by students contemplating entrance into graduate programs in chemistry, or employment in the chemical industry.

The major requirement for the A.B. degree includes the following: 151-152-153; 241-242; 301-302 or 305-306-307; 303-304 or 308-309; 325 or any two of the pairs 431-434, 432-435, 433-436; 351 or 453-454-455; 476; and a course in biochemistry. A full year's work is required in at least one of the following fields: analytical (241-242 and any two of the pairs 431-434, 432-435, 433-436), organic (305-306-307), physical (453-454-455), or biochemistry (490-491-492). ENG 151 and 305J are also recommended as above.

## Chemistry Minor

A minor program in chemistry requires completion of at least 30 quarter hours of chemistry coursework including CHEM 121-2-3 or 151-2-3 and 301-2-3 or 305-6-7-8, as well as any two of the following: CHEM 241 and 242, 351 or 453, 489 or 490, and 476. Additional courses required to meet the 30 hour minimum can be chosen from any other courses for which prerequisites have been satisfied.

## B.S. in Forensic Chemistry

(Major code #3310)

The B.S. degree in forensic chemistry is a four-year program. Forensic chemistry is the application of chemistry and related sciences to criminal investigation. The program prepares students to work in modern crime laboratories or other law enforcement agencies such as FDA, OSHA, and EPA or to pursue graduate work in forensic chemistry or forensic sciences.

The major requirements for the degree include CHEM 151-152-153; 241-242; 301-302-303-304; 351, 460, 431-432-433-434-435-436; 487, and one course to be selected from CHEM 330, 400A-B, 476, 479, 489, 490, and 499. Extradepartmental requirements are ART 192; LET 100, 120, 140, 200, 250, and 260; MATH 163A and 163B; PHYS 201, 202, and 203; and ZOOL 170, 300, and 364. ENG 151 and 305J are recommended for meeting English composition requirements.

Students interested in the program should consult the Director, Forensic Chemistry Program, Department of Chemistry, for advance advising and schedule planning.

**101 Chemistry Applied to Today's World (4)** (2A)  
(spring) Designed for nonscience majors with little or no previous experience with chemistry. Applications of basic principles of chemistry to real world situations. Instruction will include use of the video series, "The World of Chemistry." 4 lec.

**115 Preparation for College Chemistry (2)**  
Prereq: fr only, or perm. (fall) For students who have not had high school chemistry or have had inadequate preparation to enter regular chemistry sequence. Material presented includes metric system, atomic and molecular structure, formulas, equations, states of matter, and problem solving. Will not satisfy any part of natural science requirement of College of Arts and Sciences. 2 lec.

**121 Principles of Chemistry I (4)** (2N)  
(fall, winter) Introduction to chemistry through study of atomic and molecular structure, periodic table, and states of matter. Recommended for students in College of Engineering and Technology (except chemical and mechanical engineers), College of Education (except B.S.Ed. majors in biological science, chemistry, and physics), and other programs requiring only 1 yr of chemistry. Credit not allowed for both 121 and 151. 3 lec, 3 lab.

**122 Principles of Chemistry II (4)** (2N)  
Prereq: C- or better in 121, (winter, spring) Introduction to descriptive inorganic chemistry through study of solutions and concept of equilibrium. Credit not allowed for both 122 and 152. 3 lec, 3 lab.

**123 Principles of Chemistry III (4)** (2N)  
Prereq: 122 or 152 or perm. (spring, fall) Designed to survey organic chemistry and biochemistry and their impact upon daily existence. 3 lec, 3 lab.

**151 Fundamentals of Chemistry I (5)** (2N)  
(fall, winter, summer) General course in fundamental chemical principles. Atomic structure, periodic classification, bonding, mole concept, and stoichiometry with problem solving. Recommended for majors in chemistry, chemical engineering, mechanical engineering, botany, zoology, medical technology, secondary education (B.S.Ed. in biological sciences, chemistry, and physics), and preprofessional (biological science) areas. Credit not allowed for both 121 and 151. 4 lec, 3 lab.

**152 Fundamentals of Chemistry II (5)** (2N)  
Prereq: C- or better in 151 or perm. (winter, spring, summer) Introduction to thermodynamics and chemical equilibrium through study of solutions with problem solving. Credit not allowed for both 122 and 152. 4 lec, 3 lab.

**153 Fundamentals of Chemistry III (5)** (2N)  
Prereq: 152 or perm. (fall, spring) Study of the chemistry of transition metals and selected representative elements. Introduction to nuclear and radiochemistry. 4 lec, 3 lab.

**241 Quantitative Analysis (4)**  
Prereq: 153 and concurrent with 242. (fall) Introduction to quantitative techniques to include volumetric and gravimetric methods of analysis. Concurrent registration in 242 required for initial enrollment. 4 lec.

**242 Quantitative Analysis Laboratory (1)**  
Prereq: 241 or with 241. (fall) Laboratory work to accompany 241. Concurrent registration in 241 required for initial enrollment. 3 lab.

**301 Organic Chemistry (3)\***  
Prereq: 123 or 153 or perm. (fall, summer) Designed for students who are not B.S. chemistry majors and who do not require a full-year course in organic chemistry.

**302 Organic Chemistry (3)\***  
Prereq: 301. (winter, summer) Continuation of 301. See 301 for description.

**303 Organic Chemistry Laboratory (2)\***  
Prereq: 301 or 305, or with 301. (fall, spring, summer) Designed for students who are not B.S. chemistry majors. 1 lec, 2 lab.

**304 Organic Chemistry Laboratory (3)\***  
Prereq: 303 and 302 or with 302. (winter, spring, summer) Continuation of 303. See 303 for description. 6 lab.

**305 Organic Chemistry (3)\***  
Prereq: 153 or perm. (fall) Organic chemistry for chemistry majors and other students wishing to acquire sound knowledge of classical and modern organic chemistry.

**306 Organic Chemistry (3)\***  
Prereq: 305. (winter) Continuation of 305. See 305 for description.



**307 Organic Chemistry (3)\***

Prereq: 306. (spring) Continuation of 305-306. See 305 for description.

**308 Organic Chemistry Laboratory (3)\***

Prereq: 306. or with 306. (winter) Synthesis, purification, and characterization of organic compounds. 6 lab.

**309 Organic Chemistry Laboratory (3)\***

Prereq: 308 and 307 or with 307. (spring) Continuation of 308. See 308 for description.

**325 Instrumental Methods of Analysis (4)**

Prereq: 241 and 242. (winter) Analytical chemistry course for students not majoring in chemistry, which emphasizes application of instrumental methods to solution of problems in chemical analysis. 3 lec, 3 lab.

**330 Introduction to Toxicology (4)**

Prereq: 302 or 307. Introduction to chemical, clinical, environmental, and forensic aspects of toxicology, types of poisons, how poisons act, treatment of acute poisoning, and control of poisonous materials.

**345 Chemistry of Photography (4)**

Prereq: 122 or 152 and ART 192. Basic chemistry of modern and historical photographic and photomechanical materials and processes. 2 lec, 4 lab.

**351 Physical Chemistry (4)**

Prereq: MATH 163B or 263B or perm and 153. (fall) For pre-medicine, B.S.Ed., B.S.I.H., and A.B. chemistry majors. Topics include thermodynamics, thermochemistry, equilibrium, solutions, electrochemistry, and kinetics, with special emphasis on applications in life sciences.

**400A Advanced Organic Laboratory (2)**

Prereq: 307, 309. (fall, spring) Advanced lab techniques and instrumentation. 1 lec, 6 lab (for five week session).

**400B Advanced Inorganic Laboratory (2)**

Prereq: 476 or with 476 (fall, spring). Advanced inorganic laboratory synthesis and techniques. 1 lec, 6 lab (for five week session).

**420 Chemical Literature (3)**

Prereq: 24 hrs. Instruction in use of chemical literature and application to scientific writing.

**431 Chemical Separation Methods (3)**

Prereq: 351 or 453 or with 351 or 453. (winter) Modern methods of separating components of complex mixtures with emphasis on operation and application to analytical chemistry. Topics include liquid-liquid extractions, partition chromatography, ion-exchange, gas-chromatography, high pressure liquid chromatography, exclusion chromatography, and electrophoresis. Concurrent registration in 434 required for initial enrollment. 3 lec.

**432 Chemical Instrumentation and Electrochemistry (3)**

Prereq: 351 or 453 or with 351 or 453. (spring) Modern electrochemical techniques and instrumentation with emphasis on their applications in analytical chemistry. Topics include potentiometry, specific ion electrodes, DC and AC polarography, pulse polarography, coulometry, chronocoulometry, cyclic voltammetry, and rapid scan voltammetry. Concurrent registration in 435 required for initial enrollment. 3 lec.

**433 Spectrochemical Analysis (3)**

Prereq: 351 or 453 or with 351 or 453. (fall) Survey of spectrochemical instrumentation with emphasis on their operation and applications in analytical chemistry. Topics include atomic absorption, atomic emission, molecular absorption and molecular emission and will cover emission-absorption phenomena in the X-ray, ultraviolet, visible, and infrared regions of electromagnetic spectrum. Concurrent registration in 436 required for initial enrollment. 3 lec.

**434 Chemical Separation Methods Laboratory (1)**

Prereq: 431 or with 431. (winter) Laboratory work to accompany 431. 3 lab.

**435 Chemical Instrumentation and Electrochemistry Laboratory (1)**

Prereq: 432 or with 432. (spring) Laboratory work to accompany 432. 3 lab.

**436 Spectrochemical Analysis Laboratory (2)**

Prereq: 433 or with 433. (fall) Laboratory work to accompany 433. 4 lab.

**450 Principles of Quantum Chemistry (3)**

Prereq: MATH 263D or perm. Introduction to solution of problems concerning molecular structure and spectroscopy in terms of quantum theory.

**453 Physical Chemistry (3)**

Prereq: 153, MATH 263D or with 263D, PHYS 253. (fall) Calculus-based study of thermodynamics with applications to chemical equilibria.

**454 Physical Chemistry (3)**

Prereq: 453. (winter) Continuation of 453. Thermodynamics of ionic solutions, electrochemical cells, and surfaces. Kinetic theory of gases. Chemical kinetics.

**455 Physical Chemistry (3)**

Prereq: 454. (spring) Continuation of 454. Quantum theory with applications to molecular structure, molecular and resonance spectroscopy including NMR and ESR, statistical thermodynamics.

**456 Physical Chemistry Laboratory (3)**

Prereq: 351 or 453. Experimental determination of molecular weights, ionic velocities, composition of azeotropes and complex ions, equilibrium constants, phase rule diagrams, etc. Instrumental procedures include refractometry, polarimetry, viscometry, etc. 6 lab.

**457 Physical Chemistry Laboratory (3)**

Prereq: 456. Continuation of 456. 6 lab.

**458 Chemical Thermodynamics (3)**

Prereq: 455. (spring) Concepts of energy and entropy and their use in predicting feasibility and extent of chemical reactions.

**459 Physical Chemistry (3)**

Prereq: 454 (spring) Continuation of 454. Topics include surfaces, solids, electrical conduction and transport properties, photochemistry, and polymers.

**460 Spectroscopic Methods in Organic Chemistry (3)**

Prereq: 302 or 307. (spring) Modern spectroscopic methods as employed in organic chemical research: NMR, IR, UV, ESR, and mass spectrometry.

**471 The Physical Chemistry of Macromolecules (3)**

Prereq: 454. Effects of structure and molecular weight on physical and chemical properties of macromolecules. Topics include molecular weight distribution, solubility, polymer conformation, different types of polymers, synthesis and reactions. Both synthetic and natural polymers considered.

**476 Modern Inorganic Chemistry (4)**

Prereq: 351 or 453 or with 351 or 453. (fall) Considers relationship between physical and chemical properties of inorganic substances and nature of bonding and structures involved. 4 lec.

**479 Radiochemistry (4)**

Prereq: 153. Applications of isotopes to problems in chemistry; safe handling of radioactive material; detection and determination of radiation. 2 lec, 4 lab.

**480 Advanced Organic Chemistry (4)**

Prereq: perm. (fall) Structural theory, stereochemistry, reactive intermediates, and reaction mechanisms.

**487 Forensic Chemistry (6)**

Prereq: C or better in 433. Surveys chemical problems most frequently encountered in crime lab and their currently acceptable solutions, as well as special techniques not covered in other analytical chemistry courses. 3 lec, 6 lab.

**489 Basic Biochemistry (4)**

Prereq: 302 or 307 or perm. (winter) Survey course, including introduction to biochemical concepts and techniques, metabolic pathways, and information storage and transmission, with emphasis on directions of current biochemical research.

**490 Introduction to Biochemistry (4)**

Prereq: 302 or 307. (fall) Macromolecular structure of biomolecules.

**491 Introduction to Biochemistry (3)**

Prereq: 490. (winter) Bioenergetics, metabolism, and metabolic control systems.

**492 Introduction to Biochemistry (3)**

Prereq: 491. (spring) Complex integrated biochemical systems.

**493 Biochemical Techniques (2)**

Prereq: biochemistry major or perm. (fall) Laboratory course using



modern biochemical and molecular biology techniques including electrophoresis, chromatography, enzyme kinetics, and amino acid analysis. 4 lab.

#### 494 Biochemical Research (1-5)

Prereq: 493. (fall, winter, spring) Independent work in a biochemistry laboratory. Students will be assigned a research project which will use various biochemical research techniques. Students may enroll one or more quarters. 2-10 lab.

#### 497 Forensic Chemistry Internship (3-10)

Prereq: sr rank in Forensic Chemistry Program and perm. Supervised work in approved forensic science lab to gain practical experience. Oral and written reports required.

#### 499 Undergraduate Research (1-5)

Prereq: jr or sr rank with 2.75 gpa in chemistry courses and perm of dept chair. Independent work for qualified upperclass majors in chemistry and related areas. Student may enroll one or more quarters.

\*Credit is not allowed for both sequences of organic chemistry courses — 301-2-3-4 and 305-6-7-8-9. Transfer from the middle of one sequence to the other may be possible, but is permitted only upon approval of the faculty in the courses involved.

## CHINESE

See Foreign Languages and Literatures.

## COMMUNICATION SYSTEMS MANAGEMENT

The major requirements for the Bachelor of Science in communication systems management include 32 hours in the subject area, as well as courses in several other participating schools and departments (See Curricula and Requirements). All majors must take COMT 100, 270, 370, 375, 470, and three topical seminars.

#### 100 Introduction to Communication Systems Management (4)

General principles and techniques of point-to-point telecommunications. Includes brief history of field and general introduction to technology of voice, data, and image transmission.

#### 270 Management of Voice and Communication Systems (4)

Prereq: 100, major. Principles of operation and design of typical voice, data, and communication systems. Includes traffic studies, use of Erlang tables, queuing techniques, and traffic engineering software.

#### 370 Regulatory Issues in Communication Systems Management (4)

Prereq: 100, 270, major. Study of regulatory system, tariff structures, and costing of telecommunications across state and national boundaries. Basic policy development at state and federal levels. Impact of divestiture of Bell Operating Companies.

#### 375 Technology of Voice/Data Systems (4)

Prereq: major, TCOM 308. Basic laboratory experience in the technologies commonly found in voice and data telecommunications systems. Students design, examine, build basic telecommunications circuits, develop competency in the use of telecommunications test equipment and skills in system problem analysis.

#### 392 Topical Seminar (4)

Prereq: 100, 270, major. Specialized topics, taught by faculty or visiting professionals. Topics include digital technology, data networks, and other issues.

#### 462 Internship in Communication (1-12)

Prereq: 100, 270, 370, major, jr or sr rank. Internship with approved company, agency, or organization. Application necessary; comprehensive paper required.

#### 470 Management of Communication Resources (4)

Prereq: 100, 270, 370, major. Case studies in costing communication carriers; developing and responding to RFPs/RFOs; and needs analysis of communication installations. Extensive paper required.

#### 480 Senior Seminar (2)

Weekly discussions with faculty and telecommunications professionals; position papers required for discussion and presentation.

#### 490 Special Studies (1-4)

Prereq: 100 and proposal. Independent study, supervised by faculty. Repeatable to 12 hours.

#### 492 Topical Seminar (4)

Prereq: 100, 270, 370, major. Specialized topics taught by faculty or J. Warren McClure Distinguished Visiting Professor. Topics include project management, international communication, system security, advanced data networks.

## COMPARATIVE ARTS

Offerings include courses in introduction to fine arts and history courses in individual content areas.

The following two courses are provided for majors in the College of Fine Arts who wish to study the relationship of all the arts, and for all students in the University who wish to elect courses with the basic purpose of understanding their cultural heritage: CA 117 and CA 118 include four quarter hours of credit for each quarter for a total of eight quarter hours.

The courses service the following areas:

1. Tier II requirements for majors in the College of Fine Arts;
2. Tier II requirements for students in other degree colleges and for transfer students from other universities; and
3. State requirements for certification in the College of Education.

#### 117 Introduction to Fine Arts (4) (2H)

Introduction to study aesthetic experience and an investigation of concepts of response to that experience as seen from analysis of individual works of art. Examples drawn from media of painting and sculpture, architecture, theater, music, dance, and film.

#### 118 Introduction to Fine Arts (4) (2H)

Prereq: 117. Analysis of form, media, and content of major arts stressing interrelationship among arts through recognition of common art factors.

#### 150 Viewing Performance (2)

Integrates classroom and student life activities at the University by combining the productions of the schools of Music, Dance, and Theater with a seminar course dealing with characteristics of the medium and artistic concerns. A two-hour seminar precedes and follows each of the four performances.

#### 211 History of Art (4) (2H)

Survey of western painting, sculpture, and architecture from prehistoric to early Christian. Students advised but not required to enroll in 211, 212, and 213 in sequence.

#### 212 History of Art (4) (2H)

Continuation of 211 from early Christian period of Europe through Renaissance. Students advised but not required to enroll in 211, 212, and 213 in sequence.

#### 213 History of Art (4) (2H)

Continuation of 212 from Baroque to present. Students advised but not required to enroll in 211, 212, and 213 in sequence.

#### 270 Theater History I (4) (2H)

Development of theater and drama in prehistoric, Greek, and Roman periods.

#### 271 Theater History II (4) (2H)

Development of theater and drama in Medieval and Renaissance periods.

#### 272 Theater History III (4) (2H)

Development of theater and drama from Renaissance to modern.

#### 320X Fine Arts — Florence (1-6)

Prereq: enrollment in OU Italy Program. (spring) Study of fine arts as seen and performed in city of Florence. Churches, museums, and galleries, along with theatrical and musical events provide examples for study.

#### 321 History and Literature of Music (3)

Prereq: MUS 103. R. Wetzel. History of music with survey of musical literature to 1450.

**322 History and Literature of Music (3)**

Prereq: 321 or MUS 321. *R. Wetzel*. History of music with survey of musical literature, 1450-1720.

**323 History and Literature of Music (3)**

Prereq: 322 or MUS 322. *R. Wetzel*. History of music with survey of musical literature, 1720 to present.

**327 Cultural Traditions and the Arts (4)**

Prereq: soph. and above. (fall) Principal styles of Western art as mirrored in selected masterpieces of architecture, sculpture, painting, music, and literature. Specific works of art examined in relationship to one another and against background of ideas that animated life of their times (Greek, Roman, Medieval).

**328 Cultural Traditions and the Arts (4)**

Prereq: soph and above. (winter) Continuation of 327.

**329 Cultural Traditions and the Arts (4)**

Prereq: soph and above. (spring) Continuation of 327, 328.

**350 Principles of Architecture (4)**

Introduction to styles, theories, and structural principles of architecture.

**351 Ancient Architecture (4)**

Prereq: soph. and above. Survey of architectural monuments and their historic settings in Near East, Egypt, Greece, and Rome.

**352 Medieval Architecture (4)**

Prereq: soph. and above. Survey of architectural monuments and their historical setting in Early Christian, Byzantine, Romanesque, and Gothic periods.

**353 Renaissance and Baroque Architecture (4)**

Prereq: soph. and above. Survey of architects and monuments from 15th through 18th century.

**354 19th and 20th Century Architecture (4)**

Prereq: soph. and above. Survey of architects and monuments from historical revival styles through latest stylistic trends.

**360J Writing in the Arts (4)**

(1J)

Prereq: 117, 118; major in fine arts; or perm. Critical analyses of form, media, and content in fine arts stressing instruction in critical writing.

**400 Senior Seminar: Comparative Arts (3)**

Prereq: fine arts srs or perm. Designed to increase insight of art majors into all fine arts. Specifically, to understand similarities and differences which exist among several arts through consideration of basic esthetic concerns.

**419 Great Masterworks (4)**

Life, times, and works of at least 2 major artists within specified cultural period.

**470 Tragedy (4)**

Study of tragic genre through study of plays and critical and theoretical documents.

**471 Comedy (4)**

Study of comic genre through examination of plays and critical and theoretical documents.

**472 Forms of Drama (4)**

Study of genres of melodrama, farce, and tragicomedies through examination of plays and critical and theoretical documents.

**477 American Theater and Drama (4)**

Theater and drama in U.S. from 1700 to present.

**481 Individual Problems (1-6)**

Prereq: perm.

**120 Computer Science Survey (5)**

Prereq: MATH 101 or equiv. Digital computer machine, its components, operation, control, history, and use. Particular emphasis placed on developing influence of digital computer in business, science, and humanities. Automation examined. BASIC language taught. Exercises in wordprocessing, database, and spread sheets. Course does not apply to Arts and Sciences natural science requirement. Not open to those with credit for MIS 100, HS 309, or any CS course 200 and above.

**135 Special Topics in Programming with BASIC (2-5)**

Prereq: MATH 101. Introduction to computing using micro-, personal, home, or office computers using BASIC language. Extensive programming exercises assigned exploring capabilities of computers. Course does not apply to Arts and Sciences natural science requirement. May be repeated for maximum of 5 credits.

**199 Computer Usage Laboratory (1-2)**

Prereq: Concurrent enrollment in interactive programming course. (on demand) Laboratory course for introducing students to interactive computing facilities at Ohio University: IBM 4381, VAX 11/785, VAX 11/780, and microcomputer networks.

**220 Introduction to Computing (5)**

(1M)

Prereq: MATH 113 or equiv. Algorithms, programs, and computers. Basic programming and program structure. Programming and computing systems. Debugging and verification of programs. Data representation. Organization and characteristics of computers. Survey of computers, languages, systems, and applications. Computer solution of several numerical and nonnumerical problems using 1 or more programming languages. Not open to those with credit for 321, 322, ET 240, or CSB 420. FORTRAN taught.

**223 Introduction to Computing for Business (5)**

Prereq: MATH 113 or equiv. Principles and practice of computer solution of problems in business. Typical problems exist in accounting, quantitative methods, and management. COBOL is used.

**228 Introduction to Prolog (4)**

Prereq: 120 or MIS 100 or perm. A general introduction to logic programming using the language Prolog. It will begin with an orientation on the PC system and the programming environment for Prolog. Subsequently, the content of the course will emphasize rule-based programming and the relationship between rules, queries, goals, and facts. The programming assignments will emphasize problem solving which requires deduction and the use of the built-in inference engine.

**230 Computer Programming I (5)**

Prereq: grade of C or better in MATH 113, or equiv. Basic programming and program structure. Programming and computing systems. Debugging and verification of programs. Data representation. Organization and characteristics of computers. Survey of computers, languages, systems, and applications. Computer solution of several numerical and nonnumerical problems using 1 or more programming languages. PASCAL taught. Not open to those with credit for ET 181.

**231 Computer Programming II (5)**

Prereq: grade of C or better in 230 or ET 181. Continuation of 230. Introduction to intermediate programming techniques (e.g. recursion, use of pointer variables, backtracking) and data structures. Definitions and specifications of syntax and semantics of programming languages. Continued use of structured language in 230 with examples chosen from nonnumerical problems.

**235 Advanced Programming in BASIC (5)**

Prereq: 135 or 120 with extensive programming experience. Continues 135 with advanced topics and exposure to mini- and main-frame computers. Organizing and handling files and databases will form core at level sufficient for use in small businesses and industries.

**238 Introduction to Computer Systems (5)**

Prereq: grade of C or better in 231. Computer structure, machine language, instruction execution, addressing techniques, and digital representation of data. Computer systems organization, logic design, microprogramming, and interpreters. Symbolic coding and assembly systems, macro definition and generation, and program segmentation and linkage. Systems and utility programs, programming techniques, and recent developments in computing. Several computer projects to illustrate basic machine structure and programming techniques.

## COMPUTER SCIENCE

The computer science major requirements for either the A.B. or B.S. degree are: 60 hours of coursework in the department and MATH 263A, 263B, 263C, and 263D; each course must be completed with a grade of C or better. The coursework in the department must include CS 230, 231, 238, 300, 320, 340, 361, 442, 456, 462, and two additional courses at the 400 level.

A minor in computer science may be earned by completing CS 230, 231, 238, 300, 320, 340, and 361, and one quarter of calculus, each with a grade of C or better.

**300 Introduction to Discrete Structures (5)**

Prereq: 238 or equiv and MATH 263A. Review of set algebra including mappings and relations. Algebraic structures including semigroups and groups. Elements of theory of directed and undirected graphs. Boolean algebra and propositional logic. Applications of these structures to various areas of computer science.

**320 Organization of Programming Languages (5)**

Prereq: 238 or equiv and MATH 263A. Formal definition of programming languages including specification of syntax and semantics. Simple statements including precedence, infix, prefix, and postfix notation. Global properties of algorithmic languages including scope of declarations, storage allocation, grouping of statements, binding time of constituents, subroutines, coroutines, and tasks. List processing, string manipulation, data description, and simulation languages. Run-time representation of program and data structures.

**321 Computing for Engineers and Scientists (5)**

Prereq: MATH 340. Principles and practice of computer solution of problems involving extensive numerical calculations as found in physical sciences, engineering, and numerical mathematics. Not open to those with credit for 220, 322, ET 240, or CSB 420.

**322 Computing with Statistical Packages (5)**

Prereq: soph rank and statistics course. Approximately half of course devoted to programming solutions to problems using FORTRAN, PASCAL, or PL/I. Emphasis on problem analysis, syntax, testing, and debugging of computer solutions to problems. Second half devoted to study of use of statistics packages such as SPSS for solution of statistical problems encountered in study of social, biological, and educational sciences. Not open to those with credit for 220, 321, ET 240, or CSB 420.

**340 Introduction to Computer Organization (5)**

Prereq: 238 or equiv and MATH 263A. Organization of digital computer. Data representation and internal transfer. Digital arithmetic logic unit, control section, and timing. Input-output devices and channels. Software - hardware interfaces.

**350 Survey of Computer Hardware and System Software (4)**

Prereq: 231 or MIS 330. Provides an overview of the architecture of computing equipment and system software (operating systems, editors, translators, file servers, etc.). Designed to provide information on the technical underpinnings upon which computer information and communications systems are built to students in business administration, communications management, etc.

**361 Data Structures (5)**

Prereq: 300 or equiv. Basic concepts of data. Linear lists, strings, arrays, and orthogonal lists. Representation of trees and graphs. Storage systems and structures and storage allocation and collection. Multilinked structures. Symbol tables and searching techniques. Formal specification of data structures, data structures in programming languages, and generalized data management systems.

**404 Design and Analysis of Algorithms (5)**

Prereq: 361. Correctness of algorithms. Analysis of efficiency of algorithms — recurrence relations, worst-case and best-case behavior, average-case behavior. Design of algorithms: divide-and-conquer and balancing, greedy method, graph searching, dynamic programming, backtracking, branch-and-bound and preprocessing techniques.

**406 Computation Theory (5)**

Prereq: 300 and PHIL 320. Algorithms, recursive functions, Turing machines, decidability. (Same as PHIL 422.)

**410 Formal Languages and Syntactic Analysis (5)**

Prereq: 361. Definition of formal grammars, arithmetic expressions and precedence grammars, context-free and finite-state grammars. Algorithms for syntactic analysis: recognizers, backtracking, operator precedence techniques. Semantics of grammatical constructs: reductive grammars, Floyd productions, simple syntactical compilation. Relationship between formal languages and automata.

**411 Concurrent Programming (5)**

Prereq: 320, 361 or perm. Compares and contrasts concurrency issues in different programming languages. Remote procedure call, asynchronous buffered message passing, synchronized unbuffered message passing, and shared memory will be studied. Aims to compare and contrast the programming techniques appropriate for different communication mechanisms and to assess their relative effectiveness in different problem domains. An introduction to Petri Net and its application to designing concurrent software will be given.

**412 Parallel Computing I (5)**

Prereq: 361 or perm. Studies different parallel structures to familiarize students with the variety of approaches to parallel computing and the strengths and weaknesses of each approach. Concentrates on understanding methods for developing parallel algorithms and analyzing their performance. The advantages and disadvantages of different methods for mapping algorithms onto several different parallel architectures will be studied. Algorithms discussed will include sorting, searching, and matrix operations.

**442 Operating Systems and Computer Architecture I (5)**

Prereq: 340 and MATH 263B. Review of batch process systems programs, their components, operating characteristics, user services, and their limitations. Implementation techniques for parallel processing of input/output and interrupt handling. Overall structure of multiprogramming systems on multiprocessor hardware configurations. Details on addressing techniques, core management, system accounting, and other user-related services. Traffic control interprocess communication, design of system modules, and interfaces. System updating, documentation, and operation.

**444 Data Communications (5)**

Prereq: 442; perm or course in assembly language. Introduction to theory and methodology of computer-to-terminal and computer-to-computer communications using telecommunications facilities. Following topics considered: a) development of data transmission techniques for use on existing telephone network; b) standards and protocols for orderly control of data links between processors; c) software for support of data transmission.

**456 Software Design and Development (5)**

Prereq: 320, 361 and MATH 263B. Review of program language structures, translation, loading, execution, and storage allocation. Compilation of simple expressions and statements. Organization of compiler including compile-time and run-time symbol tables, lexical scan, syntax scan, object code generation, error diagnostics, object code optimization techniques, and overall design.

**458 Operating Systems and Computer Architecture II (5)**

Prereq: 442. Continuation of 442. Assembler language programming of system control functions: interrupt handling, virtual storage management, multiprocessing, clocks, CPU/channel states. IBM/4381 or multi-user microcomputer systems studied.

**462 Files and Data Bases (5)**

Prereq: 361 and MATH 263B. Continuation of 361, covering file structures and data bases. Random, indexed sequential, inverted, and multilist file structures; concepts of data models, data language, data security, and data integrity. Organization, storage, search, and retrieval methods of hierarchical, network, and relational data models discussed.

**464 Information Organization and Retrieval (5)**

Prereq: 462. Structure of semiformal languages and models for representation of structured information. Aspects of natural language processing on digital computers. Analysis of information content by statistical, syntactic, and logical methods. Search and matching techniques. Automatic retrieval systems, question-answering systems. Production of secondary outputs. Evaluation of retrieval effectiveness.

**468 Data Base Design (5)**

Prereq: 462 and 442. Continuation of 462. Objectives and architecture of generalized database management system (GDBMS). Models of GDBMS' hierarchical, network and relational. Data definition and data manipulation in GDBMS. File organization in GDBMS. External sorting of large databases. Survey of some commercial GDBMS. Additional selected topics.

**480 Artificial Intelligence (5)**

Prereq: 320 and 361. Definition of heuristic versus algorithmic methods, rationale of heuristic approach, description of cognitive processes, and approaches to mathematical invention. Objectives of work in artificial intelligence, simulation of cognitive behavior, and self-organizing systems. Heuristic programming techniques including use of list processing languages. Survey of examples from representative application areas. Mind-brain problem and nature of intelligence. Class and individual projects to illustrate basic concepts.

**481 Information Organization and Retrieval Projects (1-15)**

Prereq: 456, 464, and perm. Project course in area of information organization and retrieval. Each student must complete project successfully and present results. Lectures by instructor and guest speakers.

**482 Artificial Intelligence Practicum (5)**

Prereq: 480 or perm. Students will work on a major project in one of the basic areas of AI investigation. These include natural language processing, vision simulation, intelligent database systems, heuristic state-space search and inferential networks. Emphasis is on program self-modification through feedback mechanisms.

**490 Special Problems in Computer Science (1-15)**

Prereq: jr or sr rank, 3 400-level courses below 481 and perm. Special project in 1 of various subfields of computer science or application area studied, investigated, and/or solved by individual student or small group working in close relationship with instructor. Suitable problems might include construction of compiler for special purpose artificial language, perfection of computer code to solve some significant problem, or study of coherent subfield of computer science. May be repeated for credit.

**491 Senior Seminar (1)**

Prereq: sr rank. Formal presentation by individual students of specified topics from current literature in computer science and defense of interpretations or conclusions.

**492 Senior Seminar (1)**

Prereq: 491. Continuation of 491. See 491 for description.

**493 Senior Seminar (1)**

Prereq: 492. Continuation of 491-492. See 491 for description.

**496 Computer Science Internship (1-15, max 15)**

Prereq: jr rank and 3 400-level courses below 481 and perm.

## COMPUTER SCIENCE TECHNOLOGY

The following courses for the CTCH degree program in computer science technology are available only on the Lancaster campus.

**125 Introduction to Business Data Processing (4)**

Prereq: Grade of C or better in MATH 101 or equiv. Introduces student to computer concepts within framework of business applications. Students do computer assignments including word processing, spreadsheets, database, and BASIC, as well as readings in computer literature.

**135 Basic Programming I (5)**

Prereq: 125, C or better, or perm. Introduction to structured computer programming. Students learn how to analyze, design, flowchart, code, test, debug, and document business-oriented computer programs. Programming techniques center on top-down design, flowcharting, documentation, and modular-structured coding.

**223A COBOL Programming I (5)**

Prereq: 125 or 135, C or better, or perm. Introduces the concepts of structured computer programming using COBOL. Students analyze, design, program, test, and document business-related applications. Emphasis on using top-down design, constructing flowcharts, writing system documentation, and coding modular-structured programs.

**223B COBOL Programming II (5)**

Prereq: 223A, C or better. Continuation of 223A structured COBOL programming. Major topics include control break processing, table handling, data manipulation, subprograms, and file processing. Top-down design, flowcharts, system documentation, and modular-structured programming are emphasized.

**224 Project in Application Programming (5)**

Prereq: 223B, C or better. Application of structured system development and modular-structured programming techniques to a business-related computer programming project. Students analyze, design, program, test, maintain, and document a moderately complex business system.

**230 Computer Programming I (5)**

Prereq: Grade of C or better in MATH 113 or equiv. Basic programming and program structure. Programming and computing systems. Debugging and verification of program. Data representation. Organization and characteristics of computers. Survey of computers, languages, systems, and applications. Computer solution of several numerical and nonnumerical problems using one or more programming languages. PASCAL taught. Not open to those with credit for CS 230 or ET 181.

**231 Computer Programming II (5)**

Prereq: Grade of C or better in 230 or equiv. Continuation of 230. Introduction to intermediate programming techniques (e.g., recursion, use of pointer variables, back tracking) and data structures. Definitions and specifications of syntax and semantics of programming languages. Continued use of structured language in 230 with examples chosen from nonnumerical problems. Not open to those with credit for CS 231.

**235 Basic Programming II (5)**

Prereq: 135, C or better. Continuation of 135 structured programming. Topics include control structures, on-line data entry, array handling, and field organization, updating, and processing. Top-down design, flowcharting, system documentation, and modular-structured programming are emphasized.

**238 Assembler Programming (5)**

Prereq: MATH 113 and 135, C or better, or perm. An introduction to machine organization and structured Assembler language programming. Emphasis on top-down design, flowcharting program logic, and modular-structured coding as applied to Assembler language.

**250 FORTRAN (5)**

Prereq: MATH 113. Use of the computer to organize, store, control, manipulate and process data using the FORTRAN language to solve mathematical and scientific programs. Not open to those with credit for CS 230, ET 240, or MIS 420.

**260 Introduction to Microcomputers (4)**

Prereq: 238 or perm. Introduction to computing and problem solving using microcomputers. File management and graphic capabilities. Operating systems and utilities. Several programs assigned to emphasize techniques.

**280 Operating Systems (4)**

Prereq: MATH 113 and perm. Designed to give the student a look at different operating systems, such as IBM (OS and DOS) mainframe and microcomputers, and others. How these systems operate and are used. Their similarities and differences. Job Control Language, batch processing, spooling, and CMS facility.

**285 Database Management (5)**

Prereq: 223A. Introduction to the use of Database Management Systems. Focus will be on applying the techniques of database to create effective and efficient systems.

**290 Studies in Computer Science (1-5)**

Prereq: 125 and at least one programming course, C or better. Provides the opportunity to explore or expand upon subjects or topics not covered or only briefly covered in other CTCH courses. Topics may vary from year-to-year and may include either business or scientific applications in computer science.

**291A Systems Analysis I (4)**

Prereq: 125 or 223A or perm. Presents a structured approach to systems development through use of structured analysis methods within the established system life cycle for computer systems.

**291B Systems Analysis II (4)**

Prereq: 291A. Continuation of 291A, Systems Analysis I, with emphasis placed on design and implementation of computer systems.

**295 Introduction to Discrete Structures (5)**

Prereq: 238 and MATH 163A or 263A. Review of set algebra including mappings and relations. Algebraic structures including semi-groups and groups. Elements of theory and directed and undirected graphs. Boolean algebra and propositional logic. Applications of these structures to various areas of computer science.

**299 Practicum (1-10)**

Prereq: perm.

## DANCE

**090 Composition Laboratory (0)**

This course is to be taken in conjunction with composition classes.

**101A Modern Dance Technique I (3)**

Prereq: perm. Introduction to basic technical skills of modern dance including alignment, strength, flexibility, rhythmic accuracy, and reproduction of a movement shape.

**102A Modern Dance Technique I (3)**

Prereq: perm. Continuation of 101A.

**103A Modern Dance Technique I (3)**

Prereq: perm. Further development of 102A.

**101B Ballet Technique I (2)**

Prereq: perm. Introduction to ballet and the development of basic technical skills within the classical ballet tradition. Execution of basic ballet vocabulary with an emphasis on classical line.

**102B Ballet Technique I (2)**

Prereq: perm. Continuation of 101B.

**103B Ballet Technique I (2)**

Prereq: perm. Further development of 102B.

**101C Beginning Composition (2)**

Prereq: perm. Exploration of movement materials through improvisation and short problems dealing with rhythm, space, movement qualities, and dynamics.

**102C Beginning Composition (2)**

Prereq: 101C or perm. Continuation of 101C.

**103C Beginning Composition (2)**

Prereq: 102C or perm. Further development of 102C.

**111 Music for Dance I (2)**

Prereq: perm. Nature and principles of rhythmic structure in dance and music.

**120 Introduction to Dance (3)**

(A) modern dance, (B) ballet, (C) jazz I.

**150 Viewing Performance (2)**

Integrates classroom and student life activities at the university by combining the O.U. Artist Series and major productions of the schools of Music, Dance, and Theater with a seminar course dealing with characteristics of the medium and artistic concerns. A two-hour seminar precedes and follows each of the four performances.

**170 Viewing 20th Century Dance (4) (2H)**

Art of dance from broad point of view, involving dance viewing, literature, and participation. Deals with aesthetic, physiological, social, and cultural aspects.

**201A Modern Dance Technique II (3)**

Prereq: perm. Development of basic technical skills for modern dance. More complex coordinations which add more spatial and dynamic considerations.

**202A Modern Dance Technique II (3)**

Prereq: perm. Continuation of 201A.

**203A Modern Dance Technique II (3)**

Prereq: perm. Further development of 202A.

**201B Ballet Technique II (2)**

Prereq: perm. Expanded balletic movement vocabulary with continued emphasis on basic technical skills. Musicality will be emphasized.

**202B Ballet Technique II (2)**

Prereq: perm. Continuation of 201B.

**203B Ballet Technique II (2)**

Prereq: perm. Further development of 202B.

**201C Intermediate Composition (2)**

Prereq: 103C or perm. Choreographic studies to enhance the student's understanding and appreciation of the creative process by developing the concepts of rhythm, space and dynamics into longer, more detailed studies.

**202C Intermediate Composition (2)**

Prereq: 201C or perm. Continuation of 201C.

**203C Intermediate Composition (2)**

Prereq: 202C or perm. Further development of 202C.

**220 Dance Technique II (2)**

Prereq: 120 or equiv. (A) modern dance, (B) ballet, (C) jazz.

**230 Introduction to Dance Kinesiology (2)**

Introduces student to basic anatomical materials, kinesiological concepts, and their relationship to production of dance movement.

**240 Practicum in Teaching Dance I (1)**

Prereq: perm of instructor. Observation and assistance in student teaching. May be repeated.

**250 Ethnic Dance of Non-Western Cultures (2)**

Dances from selected non-Western cultures with emphasis on style and related folklore.

**255 Ethnic Dance of Western Cultures (2)**

Dances from selected Western cultures with emphasis on style and related folklore.

**301A Modern Dance Technique III (3)**

Prereq: perm. Refinement of technical skills through more complex movement patterns. Additional emphasis on performance, phrasing, dynamics, and spatial concerns.

**301B Ballet Technique III (2)**

Prereq: perm. Employment of technical skills through more complex balletic patterns and expanded classical vocabulary. Additional emphasis on performance, phrasing, and dynamics.

**301C Advanced Composition (2)**

Prereq: 203C or perm. The synthesis of choreographic elements, devices, and musical or sound choices into studies having a sense of form and content.

**302A Modern Dance Technique III (3)**

Prereq: perm. Continuation of 301A.

**302B Ballet Technique III (2)**

Prereq: perm. Continuation of 301B.

**302C Advanced Composition (2)**

Prereq: 301C or perm. Continuation of 301C.

**303A Modern Dance Technique III (3)**

Prereq: perm. Further development of 302A.

**303B Ballet Technique III (2)**

Prereq: perm. Further development of 302B.

**303C Advanced Composition (2)**

Prereq: 302C or perm. Further development of 302C.

**310 Accompaniment for Dance (2)**

Prereq: 111 or perm. Basic problems in accompanying dance and analysis of dance forms related to accompaniment.

**312 Music for Dance II (3)**

Prereq: 111 or equiv. Also for music composition majors who wish to write for dance theater. History of music for dance. Choreographer-composer relationship.

**313 Dance Notation I (3)**

Prereq: perm of instructor. Principles of dance notation.

**320 Dance Technique III (2)**

Prereq: 220 or equiv. (A) Modern dance, (B) ballet, (C) Jazz.

**330 Dance Movement Lab (1-3)**

Prereq: perm. Addresses individual problems related to the production of movement. Means to augment physical function and expand the qualitative range of the mover are explored.

**331 Analysis of Dance Movement (4)**

Prereq: 230. Explores skeletal alignment and deviation, muscular development and function, and mechanical efficiency in production of dance movement. Basic to course study is thorough understanding of principles of stability and motion as they relate to dance.

**351 Dance Cultures of the World I (4) (2T)**

Introduction to dance cultures of world (excluding Western art dance). Function of dance in society and its relationship to other arts.

**352 Dance Cultures of the World II (4) (2T)**

Same as 351.

**353 Dance Cultures of the World III (4) (2T)**

Same as 351.

**370 Viewing 20th Century Dance (4)**

Prereq: not open to students who have had 170; jr rank and above. Art of dance from broad point of view, involving dance viewing, literature, and participation. Deals with esthetic, physiological, social, and cultural aspects.

**380 Practicum in Dance Production (1)**

Prereq: perm of instructor. Supervised lab practice in production and/or performance. May be repeated.

**385 Dance Repertory (1-3)**

Prereq: majors only, audition and perm; may be repeated for total of 12 hrs. Rehearsal and performance of choreographic works taught by choreographer or reconstructors with aid of videotape, film, and/or dance scores.

**401A Modern Dance Technique IV (3)**

Prereq: perm. Employment of technical skill to address the more subtle demands of performance focus, projection, expressivity, and dynamic range.

**401B Ballet Technique IV (2)**

Prereq: perm. Employment of technical skills and performance demands within the classical ballet tradition.



**402A Modern Dance Technique IV (3)**

Prereq: perm. Continuation of 401A.

**402B Ballet Technique IV (2)**

Prereq: perm. Continuation of 401B

**403A Modern Dance Technique IV (3)**

Prereq: perm. Further development of 402A.

**403B Ballet Technique IV (2)**

Prereq: perm. Further development of 402B.

**411 Dance Notation II (3)**

Prereq: 313 or perm. Continuation of 313 with more advanced reading and writing in notation.

**420 Dance Technique IV (2)**

Prereq: 320. (A) modern dance, (B) ballet, (C) jazz.

**432 Dance Kinesiology Seminar (2)**

Prereq: 331. Assists student to construct anatomically sound and functionally effective dance class.

**440 Practicum in Teaching Dance II (2)**

Prereq: 240 and perm. Student teaching under supervision.

**441 Teaching Dance I (3)**

Prereq: perm of instructor. Principles of teaching dance and their practical application. Dance for children.

**442 Teaching Dance II (2)**

Prereq: at least 1 qtr of 240; co-req: 440. Principles of teaching dance and their practical application. Dance for adolescents.

**443 Teaching Dance III (2)**

Prereq: at least 1 qtr of 240; co-req: 440. Principles of teaching dance and their practical application. Dance for adults.

**471 History of Dance I (4)**

(2H)

Development of early Western dance in the 20th century with focus on contemporary dance through the present.

**472 History of Dance II (4)**

(2H)

Tribal forms: survey of dance forms and their functions. Dance motivation from sympathetic magic in tribal societies, in mythic ritual, and in dance-drama.

**473 History of Dance III (4)**

(2H)

Development of Western Dance from classic times through 20th century ballet, with emphasis on Baroque, Romantic, and Diaghilev periods.

**480 Production Problems for Dance Theater (2-4)**

Prereq: perm, max 4 cr. Includes choreography, performance, and production aspects of senior projects and other dance events.

**490 Independent Study (1-10)**

Prereq: perm of instructor.

**494 Internship (1-16)**

Prereq: perm. Provides credit for internship experience in which some dance majors may participate. Internship allows individual to gain actual experience in field of dance and related areas, e.g., apprentice/performing, technical production, arts administration.

**210 Engineering Mechanics II (4)**

Prereq: 200 or perm. Introduction to strength of materials. Axial, torsional, and flexural loadings; plane stresses; beams; columns; deflections; statically indeterminate systems; testing methods. 3 lec, 2 lab.

**220 Machine Design (3)**

Prereq: 210 or perm. Design of machine elements. Shafts, brakes, clutches, belts, couplings, bearings, springs, gears, fasteners, splines, and keys. Stresses in machine parts, materials applications. 3 lec.

**230 Tool Design (4)**

Prereq: 150; IT 115, 216; or perm. Basic jig and fixture design. Relation to manufacturing processes, material requirements, introduction to die design, gauging, and cutting tools. Design projects. Use of standards. 1 lec, 6 lab.

**240 Mechanisms (4)**

Prereq: 200, IT 121, or perm. Design and analysis of simple mechanisms. Kinematics and kinetics of rigid bodies, graphical analysis of force, velocity and acceleration problems, linkages, instantaneous centers, gear trains, cams, rolling contact. 1 lec, 6 lab.

**250 Structural Design (4)**

Prereq: 210 or perm. Design of structural components in buildings. Foundations, connections, materials selection, use of industry standards. 1 lec, 6 lab.

**299 Special Problems (1-3, max 6)**

Prereq: perm. Individual projects or internship experiences under direction of faculty member in design option.

## ECONOMICS

Two opportunities are open to students interested in majoring in economics: a liberal arts program in the College of Arts and Sciences and a business economics program in the College of Business Administration.

Majors in economics in the College of Arts and Sciences must complete the A.B. degree requirements of the college, take MATH 163A, and, in addition, take at least 40 hours of economics including ECON 103, 104, 303, 304, 381, and 385 or 482.

Students with definite career goals are encouraged to follow a specific track within the economics major in the College of Arts and Sciences. A track identifies those electives which are most relevant to a given career. For example, courses most relevant to the prelaw track include ECON 231, 260, 316, 321, 332, 334, and 352. For the policy analysis track, ECON 231, 311, 312, 313, 315, 322, 425, and 430 are among those recommended. For the business economics track, ECON 231, 305, 320, 332, 340, and 360 are recommended. Additional information can be obtained from the Department of Economics.

A minor in economics consists of a minimum of 28 credit hours in economics including ECON 103, 104, 303, 304, and at least two other courses at the 300 level or above.

Majors in business economics in the College of Business Administration must complete the B.B.A. degree requirements in the college and take at least 20 additional hours of economics including ECON 304 and 385 or 482. ECON 380 and 381 may not be counted toward meeting this 20-hour course requirement.

**103 Principles of Microeconomics (4)**

(2S)

Prereq: MATH 101 or higher math placement. Basic theory and economic analysis of prices, markets, production, wages, interest, rent, and profits.

**104 Principles of Macroeconomics (4)**

(2S)

Prereq: 103 and MATH 101 or higher math placement. Basic theory of national income analysis. Causes of unemployment and inflation. Monetary and fiscal policies of the federal government.

**213 Current Economic Problems (4)**

Prereq: 103 and 104. Application of economic theory to current economic problems with emphasis on public policy implications. Depressed areas, technological unemployment, economic growth, energy, inflation, and agricultural instability considered.

**214 The Economics of War and Peace (4)**

Prereq: 103 and 104. Application of techniques of economic analysis to examination of various aspects of national military involvement. Includes consideration of both microeconomic and macroeconomic implications of war and peace.

## DESIGN TECHNOLOGY

The following courses for the A.A.S. program in design technology are available only on the Lancaster campus.

**100 Introduction to Industrial Technology (3)**

Overview of design and manufacturing options. Topics include machining, welding, steel production, quality control, interrelation of processes, design concepts, materials, mechanisms, and structures. Plant tours, lab work, and projects involved. Recommended for students having little or no background in mechanical design or manufacturing. 2 lec, 2 lab.

**150 Computer Aided Drawing (3)**

Prereq: IT 101 or perm. Introduction to use of computers for making engineering drawings. Uses software for personal computers to create multiview drawings of machine parts and other projects selected by student. No computer background required. 6 lab.

**200 Engineering Mechanics I (4)**

Prereq: MATH 115 or perm. Basic statics and dynamics. Coverage includes vectors, Newton's laws, trusses, frames and machines, friction, moments of inertia, particle kinematics and kinetics, work-energy, impulse-momentum. 4 lec.



**231 Government Regulation of Business (4)**

Prereq: 103 and 104. Social consequences of monopoly and competition. Various policy prescriptions dealing with economic concentration and market structure considered, as well as impact of these policies on U.S. business. Government regulation of business reviewed and evaluated.

**301 Introduction to Economic Analysis (4)**

Prereq: not open to fr or to those who have had 104. Description same as for 104 but content treated at more advanced level.

**302 Introduction to Economic Analysis (4)**

Prereq: not open to fr or those who have had 103. Description same as for 103 but content treated at more advanced level.

**303 Microeconomics (4)**

Prereq: 103 and 104. Price system as allocative mechanism. Price and production policies of individual firms and consumers under alternative market conditions and analysis of these policies on social efficiency of resource allocation. Students expected to have understanding of elementary algebra and geometry.

**304 Macroeconomics (4)**

Prereq: 104, Jr; soph If major. Factors determining level of nation's economic activity and responsible for growth and stability in nation's economy. Part of course devoted to measures of national income while remainder consists of analysis of interrelationships among production, price levels, relative prices, employment, and capital formation. Students expected to have understanding of elementary algebra and geometry.

**305 Managerial Economics (4)**

Prereq: 103, QBA 201, and MATH 163A. Analysis of decision making in enterprise; market environment; measurement of influence of policy and nonpolicy variables on sales and costs; sales, cost, and profit forecasting; empirical studies of market structure and pricing; may include various applications of linear programming.

**307 History of Economic Thought (4)**

Prereq: 103 and 104. Evolution of major economic doctrines; mercantilists and cameralists, phycocrats, Adam Smith and classical school, historical school, Austrian school, Alfred Marshall and neoclassicists.

**308 Modern Economic Thought (4)**

Prereq: 103 and 104. Contributions to economics of most significant writers since Alfred Marshall.

**310 Urban Economics (4)**

Prereq: 103 and 104. Application of economic analysis to urban problems; urban economic growth and structure (location patterns, land use and environment, urban transportation, and housing); human resources in urban economics and public sector in metropolitan context.

**311 Inequality of Personal Wealth and Income (4)**

Prereq: any course in statistics. Quantitative and qualitative differences in wealth and income between low, middle, and high income groups in society using historical, statistical, and mathematical techniques. Open to all students.

**312 Economics of Poverty (4)**

Prereq: 103 and 104. Incidence, causes, and consequence of poverty in affluent society. Economic theory, history, statistics applied to analysis of poverty-reduction measures.

**313 Economics of the Environment (4)**

Prereq: 103. Economic analysis of such environmental matters as air, water, and noise pollution, population growth, and land use. Emphasis placed on use of economic theory and empirical research in evaluating environmental policies.

**314 Natural Resource Economics (4)**

Prereq: 103, MATH 163A. Explores the economic aspects involved in the extraction and utilization of both renewable and nonrenewable natural resources. Topics include the economics of oil and mineral extraction, groundwater use, agricultural practices, forestry, and fisheries. It also examines the allocation of property rights and economic benefits and costs of natural resource use.

**315 Economics of Health Care (4)**

Prereq: 103 and 104. Allocating resources to health care, economics of hospital care, health care in U.S. and abroad, supply and demand for nurses, solution of health care problems: paramedics, prepaid plans, malpractice problems.

**316 Economics and the Law (4)**

Prereq: 303 or 305 or Instr. perm. Major topics are property, contracts, and torts. Class time is divided between economic

analysts of these topics in the abstract and actual legal cases that involve these topics. Legal cases are analyzed in terms of efficiency and fairness.

**320 Labor Economics (4)**

Prereq: 103 and 104. Economic forces generating modern labor problems. History of labor movement; labor in politics; labor-management relations; wages and full employment.

**321 Labor Legislation (4)**

Prereq: 103 and 104. Law bearing upon labor problems. Labor-relations legislation, old-age and unemployment insurance, worker's compensation, and wages-and-hours legislation.

**322 Economics of Human Resources (4)**

Prereq: 103 and 104. Current developments in theory, empirical research, and policy with respect to investment in human resources, economic value of education, manpower programs, and growth.

**332 Industrial Organization (4)**

Prereq: 303 or 305. Market structures, market conduct, and social performance of industries. Emphasis upon firms' strategic behavior in price and nonprice competition. Topics include oligopolistic pricing, strategic entry deterrence, location strategies, product quality, advertising, and research and development. Economic welfare implications of firms' behavior examined.

**334 Economics of Antitrust Law (4)**

Prereq: 103. Explores the economic behavior of the firm subject to antitrust laws. Topics include collusion, price discrimination, vertical restraints, and other behavior where the intent may be to monopolize a market. Also examines institutional incentives and economic benefits and costs of antitrust laws.

**335 Economics of Energy (4)**

Prereq: 103. Applies economic theory to analyzing public policy issues regarding energy production and use — including such topics as price controls, import dependency, conservation, supply outlook, and industry concentration.

**337 Government Regulation of Business (4)**

Prereq: 103. Economic rationale for governmental regulation of price, entry, and/or product quality. Examination of economic welfare foundations of public utility economics. Analysis of rate of return pricing. Recent developments in theory of regulation and deregulation movement.

**340 International Trade (4)**

Prereq: 103. International trade patterns, theories of absolute and comparative advantage, classical and modern trade theory, tariffs, quotas, nontariff barriers, preferential trading arrangements.

**341 International Monetary Systems (4)**

Prereq: 104. How exchange rates are determined, fixed vs. flexible rates, government intervention, fiscal and monetary policy in open economy, transmission of inflation and unemployment among nations, international capital movements, covered interest arbitrage, forward exchange, Euro-currency markets.

**342 International Economic Policy (4)**

Prereq: 340 or 340. Current economic developments of foreign and U.S. economic policy. Commercial treaties and tariff policy, exchange rate instability, balance of payments problems including LDC debt situation, international liquidity issues, trade relations among industrial, underdeveloped and Soviet-block countries, multinational corporations, roles of institutions such as World Bank, International Monetary Fund, and GATT.

**350 Economic Development (4)**

Prereq: 103 and 104. Nature of, obstacles to, and future possibilities for economic growth of nations. Special emphasis given to problems of underdeveloped countries. Studies of selected countries utilized.

**351 Agricultural Development (4)**

Prereq: 103 and 104. Patterns of agricultural development: technological and demographic changes in agriculture; socio-economic problems; marketing arrangements; case studies of specific agricultural development projects.

**352 Economic History of the United States (4)**

Prereq: 103 and 104. Economic factors in development of U.S. including historical growth of economic institutions such as banking, manufacturing, labor unions, and agriculture, from colonial times to present.

**353 European Economic History (4)**

Prereq: 103 and 104. Economic growth of developed countries. Focus on industrial revolutions in Great Britain, France, Germany, and Soviet Union. Historical experience of these countries related to various theories of economic change.

**356 Regional Development (4)**

Prereq: 103 and 104. Analysis of industrial location and urban growth within regions in connection with community, state, or national planning. Consideration of national policies of aiding special regions, such as Appalachia or metropolitan central city. North-South issues in U.S. and in other nations.

**360 Money and Banking (4)**

Prereq: 104. Role of money and banking system in determination of national income and output. Monetary theory and policy emphasized.

**370 Comparative Economic Systems (4)**

Prereq: 103 and 104. Theoretical and institutional characteristics of capitalism and socialism with specific emphasis on prevailing economic systems in U.S., Great Britain, and Soviet Union.

**372 Economics of the Soviet Union (4)**

Prereq: 103 and 104. Operation of economy of Soviet Union. Allocation of resources, planning, saving and investment, agriculture, public finance, price system, and international trade.

**380 Mathematics for Economists (4)**

Prereq: 103 and 104 and perm. Mathematical analysis in economics. Calculus and matrix algebra techniques used prominently in economics literature, together with their application to selected problems in economics.

**381 Introduction to Economic Statistics and Econometrics (4)**

Prereq: 103 and 104. Statistical methods are developed within an econometric context. Fundamental statistical topics include descriptive statistics, basic probability theory, random variables, sampling, estimation, and hypothesis testing. Specification, interpretation, and economic application of the simple linear regression model are introduced.

**385 An Introduction to Economic Methodology and Research (4)**

Prereq: 303 (or 305), 304, 381, or equiv. Methods used by economists in investigation of economic problems. First part involves research methods, including contemporary statistical estimation techniques. Second part applies these techniques to investigation of economic phenomena. Types of application include construction and testing of simple econometric model, estimation of production functions, evaluating theories of factor pricing, estimating social costs of pollution, etc.

**406 Monetary Theory and Policy (4)**

Prereq: 303 (or 305) and 304. Emphasis on monetary economics. Money demand and supply theory and policies for minimizing cyclical fluctuations in economic activity.

**425 Public Policy Economics (4)**

Prereq: 303 or 305. Survey of economic approach to analyzing public policy issues. Uses concepts of welfare economics, public choice economics, and cost-benefit analysis, as applied to sample of policy subjects.

**430 Public Finance (4)**

Prereq: 303 or 305 or perm. Role played by government as user of economic resources and redistributor of incomes. Some questions explored: need for government's entry into economy, optimal size of government, selection of tax and expenditures schemes, and effects of government economic activity on private sector.

**431 Economics of Transportation (4)**

Prereq: 303 or 305. Economics of transport pricing; regulations of transport and national transport policy.

**444 Futures Markets (4)**

Prereq: 360 or FIN 327 or perm. Contracts, trading, institutions, and strategies, including hedging and speculation. No credit if FIN 444 taken.

**455 African Economic Development (4)**

Prereq: 350 or perm. Economic characteristics of African societies as traditional economies and in process of modernization.

**473 Economics of Southeast Asia (4)**

Prereq: 350 or perm. Economic characteristics, development problems, strategies, and prospects of countries of Southeast Asia.

**474 Economics of Latin America (4)**

Prereq: 350 or perm. Economics of Latin American countries, prospects for economic development of the region, nature and origin of institutional obstacles to economic change. Economic heritage of colonial period and subsequent evolution of economic institutions, resources of the area and utilization, and trends in economic activity and policy in post-WW II period.

**482 Topics in Econometrics (4)**

Prereq: 303 or 305, 381, MATH 163A or calculus, or perm. Basic linear regression models are explored within an econometric context. Simple and multiple linear regression models are introduced under classical assumptions and developed in relation to heteroskedasticity, autocorrelation, multicollinearity, and specification errors. Models with binary regressors, models with qualitative dependent variables, and the simultaneous equations model are introduced. Computer assignments provide experience in empirical social science research.

**491 Seminar (3-5)**

Prereq: perm. Selected topics of current interest in economics area.

**493 Readings (1-15)**

Prereq: perm. Readings in selected fields of economics. Topics selected by student in consultation with faculty member.

**493X Readings (1-15)**

Prereq: perm. Study abroad.

**495 Research (3-5)**

Prereq: perm. Methodology, analysis of data, and preparation of research findings.

**497 Independent Research (1-15)**

Prereq: perm. Research in selected fields of economics under direction of faculty member.

## EDUCATION

As specified in the College of Education section of this catalog, all programs and courses in the College of Education satisfy the standards of the Ohio State Department of Education. Students are urged to consult their advisors regarding program requirements and scheduling. In particular, students should note that some pairs or groups of professional education courses must be taken concurrently. Questions may be addressed to Student Services, 124 McCracken Hall.

## Counselor Education (EDCE)

**102 Life and Career Experiences Analysis (4)**

Prereq: perm from Adult Learning Services. Seminar designed to assist adult students in clarifying career, personal, and educational goals with emphasis on documenting college-level learning from prior experience and documenting this learning for assessment.

**201 Career and Life Planning Seminar (3)**

Designed to provide knowledge and skill in career and life planning for fr and sophs, especially for those who are undecided about college major and career. Emphasis on identifying strengths, clarifying values, exploring career options, and in developing decision-making skills. *Special section for Adult Learning Services students only:* designed to provide knowledge and skill in career and life planning especially for adult who is considering job or career change. Emphasis on identifying skills, interests, experience, and values in relationship to new career choices and options.

**400 Special Topics in Guidance, Counseling, and Student Personnel (1-5)**

Prereq: perm. Independent studies, specialized projects, and seminars on following special topics: alcohol and substance abuse; biofeedback, self-control, and management of stress; marriage and family issues; assertiveness; human sexuality; and Adlerian theory, method, and research (May be repeated for max of 18 hrs.).

**410 Human Relations (3)**

Prereq: jr rank or perm. Study and practice of developing healthy and mutually satisfying interpersonal relationships. Lecture and discussion groups focus on dynamics of human relationships, factors fostering effective interaction, and significance of self concepts in human communication. Topical headings include value clarifi-

cation, games people play, self disclosure and trust, conflict resolution, sexuality, prejudice, death and dying, multicultural education, sexism, constructive use of anger, etc.

#### 420 Guidance Practices in Elementary Schools (4)

Need, scope, and nature of elementary guidance surveyed. Guidance approaches and procedures examined for their usefulness in working with children and parents. Roles of elementary school counselor and other pupil personnel specialists reviewed for their contribution to growth and development of children. Opportunity for students to achieve greater self-understanding through involvement in self-appraisal.

#### 430 Guidance in American Secondary Schools (4)

Same as 420. Pertains, however, to secondary schools.

#### 440 Foundations in Group Dynamics (4)

General principles and basic techniques of group dynamics. Interaction in human relations situations that occur in agency settings, business, classrooms, community, resident living, and various types of professionally led training, counseling, and growth groups. Through both cognitive and affective learning opportunities, students learn to understand and use group dynamics principles in areas of personal and professional interaction. Students attend weekly cognitive seminars as well as participate in on-going group lab.

### Curriculum and Instruction (EDCI)

#### 275 Learning Processes in the Classroom (5)

Prereq: PSY 101 (not available to students who have taken PSY 275) *R. Mitlas*. Focuses on major aspects of learning theories, their implications, and applications to classroom situations as well as aspects of measurement and evaluation.

#### 331J Educational Research Techniques and Writing (4)

(1J)

Prereq: jr rank. *E. Stevens*. Concentration upon communication skills of reading, writing, and speaking, utilizing educational writings dealing with history of education, philosophy, psychology, sociology, and current issues. Development of critical reading, effective writing, and speaking skills.

#### 401 Advanced Urban Field Experience (2)

Prereq: jr rank and completed application in Field Experiences Office by April 10 (early fall participants) or September 15 (late fall participants). (fall) *Staff*. Participation in urban setting as scheduled, either prior to or following fall qtr. Fall qtr registration only. These experiences provide opportunities to work with low socioeconomic status or minority students in urban schools.

#### 461 Introduction to Individualization of Education (4)

Prereq: perm. *M. Johnson*. Broad objective of course is for each participant to develop knowledge of major concepts for individualization of education and to demonstrate this knowledge through creation of instructional package ready for implementation in classroom setting. Course focus is to facilitate study of major components necessary for teacher to implement individualized instruction in classroom.

#### 465 Introduction to Teaching the Talented and Gifted (4)

*A. Leep*. Provides introduction to rationale, scope, and nature of concerns relative to education of gifted youth. Attention given to overview of problems and issues; including (A) societal factors that influence programs, (B) characteristics and identification of gifted youths, and (C) current and recommended programs.

#### 480 The Teacher, School, and Society (3)

Prereq: cannot be taken while student teaching. *A. Clubok, G. Wood, W. Rader, E. Reid, E. Stevens*. Current trends and issues in American secondary education, utilizing materials drawn from social and cultural foundations of education.

#### 492 Workshop in Curriculum and Instruction (1-15)

Prereq: perm. *Staff*. Designed to provide practicing teachers and other instructional personnel with in-service education directed toward their identified needs. Facilitates offering of short courses, workshops, and summer institutes. Areas of concentration currently available: (A) Language Arts, (B) Social Studies, (C) Science, (D) Mathematics, (E) Reading, (F) Kindergarten, (G) Individualizing Instruction, (H) Team Teaching, (I) Interaction Analysis, (J) Devel-

oping Behavioral Objectives, (K) Curriculum Development, (L) Interdisciplinary Topics, (M) Special Topics, (N) Special Education Topics, (O) Supervision of Instruction, (P) Education for Gifted.

### Economic Education (ECED)

#### 346 Economics in the Curriculum (4)

*Rader*. For teacher-education students, provides study of (A) fundamental economic concepts, (B) methods of inquiry employed by economists, and (C) relationship of economics content to classroom instruction and instructional materials. Not recommended for students who have completed ECON 103 and 104.

#### 491 Seminar (3-5)

Prereq: perm. *Rader*. Selected topics of current interest in economic education.

#### 492 Research (3-5)

Prereq: perm. *Rader*. Methodology, analysis of data, and preparation of research findings.

#### 493 Readings (1-15)

Prereq: perm. *Rader*. Readings in selected areas of economic education.

#### 497 Independent Research (1-15)

Prereq: perm. *Rader*. Research in selected fields of economic education under direction of faculty member.

#### 498 Internship (1-15)

Prereq: perm. *Rader*. Individual projects under faculty supervision. May be repeated to a maximum of 15 hours.

### Educational Administration (EDAD)

#### 452 Problems in Administration of Education (1-4)

Prereq: perm. Variable-topic course for independent study, institutes, and workshops.

### Educational Media (EDM)

#### 201 Use of Library Resources I (3)

*J. McCutcheon, S. Roberts*. Designed to acquaint student with resources available in academic library. Students learn to analyze information needs and to develop systematic approach toward solution.

#### 289 Sophomore Practicum (2)

Prereq: soph rank, perm. *S. Roberts, S. Strother*. Practicum designed to provide professional experience for sophs who have declared majors in K-12, and noncertificated media management. Also, field experience will provide opportunity for evaluation of performance at soph level. Must arrange qtr before.

#### 301 Library Service to Children (4)

*S. Roberts*. Aspects of library work with children, investigated through films, texts, current articles, field trips, and group discussion. Participants practice skills in storytelling with groups of children in library situations. Selection of library media materials important part of coursework.

#### 302 Adolescent Materials and Services (4)

*S. Roberts*. Selection process for secondary school library media center, involving examination of and evaluation of books and non-book materials; problems of maintaining intellectual freedom, and planning of programs for library media center.

#### 303 Teaching Library Skills K-12 (3)

Prereq: jr rank, 289, perm. *S. Roberts, S. Strother*. Instructional program for teaching student skills related to gathering and utilization of information. Development of sequential program of library/media center instruction which can be followed from kindergarten through grade 12, including methods and materials for instruction.

**304 Acquisition and Preservation of Materials (3)**

Prereq: 201 or perm. *S. Roberts*. Ordering, receiving, processing, housing, and preservation of print and nonprint materials in media center.

**305 Use of Library Resources II (3)**

Prereq: 201. *S. Roberts*. Study directed toward specific subjects: philosophy, psychology, fine arts, literature, history, social science, education, science and technology, and references relevant to them. Analysis of information needs and methods of meeting those needs.

**332 Microcomputer: Applications in Education (4)**

Prereq: soph rank. *M. Flemister, L. Ptkaart, S. Strother*. Provides preservice educators with introduction to use of microcomputers in education. Emphasis on evaluating hardware and software, exploring educational applications, and developing introductory program-writing skills.

**389 Junior Practicum (2)**

Prereq: jr rank, 289, perm. *S. Roberts, S. Strother*. Practicum designed to provide professional experiences for jrs who have declared majors in K-12 and noncertificated media management. Also, field experience will provide opportunity for evaluation of performance at jr level. Must arrange qtr before.

**397T Media Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.

**402 Advanced Library/Media Studies (2-5)**

Prereq: perm. *J. McCutcheon, S. Roberts, S. Strother*. Elective designed for student who wants to explore some facet of library work in greater depth.

**403 Classification and Cataloging (5)**

*S. Roberts*. Classifying and cataloging books and other print materials for high school library media center. Students make sample card catalog.

**404 Basic Cataloging of Nonprint Materials (4)**

Prereq: 403 or perm. *S. Roberts*. Cataloging nonprint materials with practice in preparation of catalog cards. Establishing procedures and guidelines relative to cataloging of nonprint materials whereby these materials may be integrated into library catalog and materials intershelved.

**480 Introduction to Educational Media (4)**

Prereq: jr rank. *M. Flemister, J. McCutcheon, S. Roberts, S. Strother*. Application of principles of educational technology and media to teaching-learning situation. Includes lab experiences in basic production of materials and equipment operation.

**480A Introduction to Educational Media (2)**

Prereq: EDSE 250, EDSE 250L, EDSE 270, EDSE 270L, admission to jr rank. *M. Flemister, J. McCutcheon, S. Roberts, S. Strother*. Clinical experience designed to provide secondary teacher education student with expertise in: (A) operation of audiovisual equipment; (B) demonstration/display board design; (C) spirit duplication; (D) mounting and preservation of materials; and (E) preparation of handmade and thermographic transparencies.

**481 Fundamentals of Instructional Design and Development: Media Emphasis (4)**

Prereq: 332, 480, 482, and perm. *S. Strother*. Investigation of principles and practices of integrating media into instructional process, including design and application of interactive instructional materials. Media examined within context of instructional design process, nature of communication, teaching, and learning.

**482 Production of Instructional Material (4)**

Prereq: jr rank and 480 or perm of instructor. *J. McCutcheon*. Develops basic techniques for design and production of wide variety of instructional and display materials. Includes lab experiences, illustration, lettering, coloring, preservation, and reproduction techniques used in creating educational displays, slide programs, transparencies, and other projected and nonprojected materials.

**483 Selection and Evaluation of Media (4)**

Prereq: 480. *S. Roberts*. Principles for selection and evaluation of print and nonprint media; use of standard selection aids and reviews, writing of annotations, policies governing building and maintenance of collection covered.

**488 Practicum in Educational Media (3)**

Prereq: 403, 480, and 489. *J. McCutcheon, S. Roberts, S. Strother*. Supervised library media field experience of professional nature of not fewer than 90 clock hrs. Because of nature of course, student must obtain perm 1 qtr previous to enrollment in course.

**489 Organization and Administration of Educational Media Programs (5)**

Prereq: 351 or perm. *S. Strother, J. McCutcheon*. Organization and administration practices for educational media programs in individual schools, school districts, and industrial settings. Emphasis on budget procedures, staffing, acquisition, organization, and evaluation techniques.

**Elementary Education (EDEL)****200 Studies of Children (4) (2S)**

Prereq: Adm. to Pro. Ed. *J. McMath*. Bases for developmental theory of education; growth sequences through adolescence; principles of development, behavior, and learning; techniques of child study; implications for educational practice. No credits awarded if HECF 160 or PSY 273 has been taken.

**200L Studies of Children—Field/Clinical (1)**

Prereq: Adm. to Pro. Ed. *J. McMath*. Designed to provide series of coordinated clinical/field experiences complementary to 200. Places students in public school settings for observations and activities related to study of child development.

**306 Kindergarten — Theory and Methods (6)**

Prereq: jr rank in teacher education. *J. McMath*. Combines evolving theory of education in kindergarten with selection and uses of learning materials through lab practice and participation experiences in local schools.

**310 Teaching the Language Arts in the Elementary Schools (3)**

Prereq: Adv. standing in Ed. *G. Berry, W. Smith*. Methods course in teaching areas of language arts other than developmental reading. Treats basic information in language development, oral and written language activities, spelling, penmanship, grammar, usage, poetry and drama, language arts organization and management, and evaluation and remediation techniques in language arts areas.

**310L Teaching the Language Arts Field and Clinical Experience (2)**

Prereq: Adv. standing in Ed. *G. Berry, W. Smith*. Field/clinical component for 310. Designed to give elementary education majors practical field and clinical experiences in public schools and is complementary to theory presented in 310.

**311 Teaching of Reading in the Elementary School (4)**

Prereq: Adv. standing in Ed. *G. Berry, Rebottini, Smith*. Preservice preparation for teaching of developmental reading, K-6; text and supplementary readings; lecture, demonstration, and discussion; multi-media resources; observations and participation in schools; projects for practical competence.

**311L Teaching of Reading in the Elementary School Field/Clinical (1)**

Prereq: Adv. standing in Ed. *G. Berry, Rebottini, Smith*. Field/clinical component to accompany 311. Gives elementary education majors practical field and clinical experiences in public schools and is complementary to theory presented in 311.

**321 Children's Literature (3)**

Prereq: Adv. standing in Ed. *J. McMath*. Treats body of literature, by genre, appropriate for children from preschool through middle-school age and various techniques for utilizing children's literature in school setting.

**321L Children's Literature — Field/Clinical (1)**

Prereq: Adv. standing in Ed. *J. McMath*. Field component for 321. Same as above.

**330 Teaching Mathematics in the Elementary School — Kindergarten through Grade 3 (2)**

Prereq: Adv. standing in teacher education and MATH 120-121-122 or equiv. *B. Beach, C. Smith*. Examination of methods and materials used in teaching of mathematics in elementary school programs. Special emphasis on use of mathematical models, adjusting instruction for individual pupil growth, and diagnosing learning difficulties in lower elementary school (K-grade 3).

**330L Teaching Mathematics in the Elementary School — Kindergarten through Grade 3 — Field/Clinical (1)**

Prereq: Adv. standing in teacher education; coreq with 330. *B. Beach, C. Smith*. Students will observe and teach mathematics

lessons in elementary school under supervision of course instructor. Proficiency in use of mathematical models and manipulative teaching aids demonstrated by each student in mathematics education lab. Field experiences will take place in primary (kindergarten-grade 3) classroom.

**331 Teaching Mathematics in the Elementary School**  
— Grades 4-8 (2)

Prereq: 330. *B. Beach, C. Smith.* Examination of methods and materials used in teaching of mathematics in elementary school programs. Special emphasis on use of mathematical models, adjusting instruction for individual pupil growth, and diagnosing learning difficulties in upper elementary school (grades 4-8). Continuation of 330.

**331L Teaching Mathematics in the Elementary School**  
— Grades 4 through 8 — Field/Clinical (1)

Coreq with 331. *B. Beach, C. Smith.* Students observe and teach mathematics lessons in elementary school under supervision of course instructor. Proficiency in use of mathematical models and manipulative teaching aids demonstrated by each student in mathematics education lab. Field experiences will take place in upper-grade-level classroom (grades 4-8).

**340 Teaching of Science in the Elementary School (4)**

Prereq: Adv. standing in teacher education; 12 hrs of science including biology and physical science. *R. Martin.* Materials and methods of teaching science in elementary schools. Textbooks, science equipment, and related instructional materials used in lab lessons.

**340L Teaching Science in the Elementary School —**  
Field/Clinical (1)

Prereq: Adv. standing in teacher education, completion of one course in each of the following science areas: Life, Physical, Earth. *R. Martin.* Practice teaching elementary science lessons in an approved setting.

**350 Teaching of Social Studies**  
in the Elementary School (3)

Prereq: 12 hrs of social science including GEOG 121, adv. standing in teacher education. *A. Leep, M. Ploghoft, W. Singleton.* Materials and methods in teaching social studies in elementary schools. Special emphasis on practical experience in preparation and teaching of units.

**350L Teaching of Social Studies in the**  
Elementary School — Field/Clinical (1)

Prereq: 12 hrs of social science including GEOG 121, adv. standing in teacher education. Coreq with EDEL 350. *A. Leep, M. Ploghoft, W. Singleton.* Field/clinical component to accompany 350. Gives elementary education majors practical field and clinical experiences in public schools and is complementary to theory presented in 350.

**372 Managing an Elementary School Classroom (2)**

Prereq: Adv. standing in teacher education. *B. Beach, A. Leep, staff.* Provides preservice teacher with knowledges and skills to manage records, learning environment, and pupils within elementary school learning setting (e.g., classroom, playground, etc.).

**411 Diagnosis and Treatment of**  
Reading Disabilities (4)

Prereq: 311/311L or EDSE 420, perm. *S. Rebottini, W. Smith.* Correlates of variability in reading proficiency. Incidence of retardation and disability. Proposed causes of failure and concept of multiple causation. Specialized materials and instructional efforts. Systematic observation of cases of reading disability and preparation of case report.

**412 Reading Laboratory Practicum (4, max 12)**

Prereq: sr rank, 411. *S. Rebottini, W. Smith.* Application of developmental approach to problem cases in reading instruction, participation in diagnostic examination, parent and teacher conferences, individual procedures in tutoring, staffing of cases, and preparation of report (Wkly group discussion period, lab sessions arranged).

**430 Modern Elementary Mathematics Curriculum (3)**

Prereq: 330. *C. Smith.* Modern elementary mathematics curriculum with emphasis on why changes are occurring. Nature of changes as reflected from experimental programs, effect of changes on methods of teaching, implementation of these changes in classroom.

**460 The Child and the Curriculum (4)**

Prereq: student teaching. (Academic yr plus 1st term of summer session.) *G. Berry, C. Smith, staff.* Develops purpose for elementary

education (through study and research of curriculum and learning problems. Emphasis on service role of elementary school curriculum to child and society and role of teacher in laying educational foundations in development of self worth for each child.

**490 Study in Elementary Education (1-5, max 15)**

Prereq: perm of dept chair. *Staff.* Independent and/or group study of some special interest and concern (problems, area, questions) under guidance of staff; assigned and suggested readings and other resources and experiences; frequent conferences; preparation of final report.

## International and Comparative Education (EDIC)

**420 Comparative Cultures and Education (4)**

Prereq: perm. *W. S. Howard.* Emphasis on distinctive cultural, economic, and political forces which shape patterns, problems, and roles of education in some selected developed and developing nations. These include U.S., some European countries, and at least one African and/or Asian nation where former or present Western culture has impact. Assessment of this impact especially on educational developments.

**425A Education and Development in Africa (4)**

Prereq: perm. *W. S. Howard.* Interdisciplinary course focusing on tradition and change in African societies, problems of political independence, economic development, cultural values in transition, tribalism and nationalism, and role of Africa in world peace and international cooperation. Tradition and change in African education, landmarks in African educational developments, and role of education in economic and technological development. Issues and problems in African education.

**425B Education and Development in Asia (4)**

Prereq: perm. *W. S. Howard.* Same emphasis as 425A on tradition and change in society, culture and education, and role of education in national development and international understanding; discussion of pertinent educational issues and problems.

**425C Education and Development in**  
Latin America (4)

Prereq: perm. *W. S. Howard.* Same emphasis as 425A-425B, on tradition and change in society, culture and education, and role of education in national development and international understanding; discussion of pertinent educational issues and problems.

**432 Perspectives in International Education (4)**

Prereq: 420 recommended, perm. *W. S. Howard.* Interdisciplinary course dealing with concept and issues of international understanding, its psychological, economic, and political preconditions; perceptions, values, and attitudes that constitute or impede understanding among individuals, groups, races, and nations; human and cultural dimensions in technical assistance programs and in international relations; role of education in attitude change and formation relative to international understanding and development.

**450 Teaching Strategies for Cultural and**  
International Understanding (4)

Prereq: perm, sr rank. *Staff.* Psychological and sociological foundations of cultural values and ways of life investigated. Strategies for developing cross-cultural understanding and cooperation studied. Emphasis on innovative approaches to learning for elementary and secondary school pupils.

## Middle School Education (EDMS)

**250 Analysis of Teacher Characteristics and**  
Teaching Tasks (4)

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250L, 270, and 270L. *M. Johnson, R. Martin, R. Skinner, G. Wood.* Immediate focus on teaching tasks and models, training in systematic observation and analysis, peer teaching, and tools for self-analysis. Recommended that EDCI 275 or PSY 275 be taken concurrently with or following this course.



**250L Analysis of Teaching Characteristics and Teaching Tasks Field Experience (2)**

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 270, and 270L. *M. Johnson, R. Martin, G. Wood.* Immediate focus on performance of undergraduate student in act of teaching in secondary school setting. Major emphasis on developing systematic skills in observation and analysis of teaching. Each student will work with cooperating teacher during qtr. Students will teach several micro-teaching lessons in schools. Session will be videotaped so students may analyze their teaching performance while viewing videotapes in clinical setting. Recommended that EDCI 275 or PSY 275 be taken concurrently with or following this course.

**270 Studies of the Learner: Development and Exceptionality (3)**

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 250L, and 270L or comparable field experience. *R. Martin, J. Thompson.* Focus on study of human growth and development, both normal and exceptional, of preadolescents and adolescents. Major emphasis on effect of cognitive, physical, social, and emotional developmental changes on learner and on comprehensive survey of nature and educational needs of exceptional students.

**270L Studies of the Learner: Development and Exceptionality Field Experience (1)**

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 250L, and 270. *R. Martin, J. Thompson, G. Wood, staff.* Field experience enables students to observe evidence of diversity in cognitive, physical, social, and emotional development during preadolescence and adolescence. Students observe and analyze characteristics of growth and development and exceptionalities in variety of field settings.

**351 Middle School Instructional Processes and Curriculum (5)**

Prereq: 250, 250L, 270, 270L, EDCI 275 or PSY 275, admission to jr. standing. *A. Clubok, M. Johnson.* To ensure that preservice teacher builds large repertory of teaching strategies and techniques. This learning experience will allow preservice teacher to gain sufficient knowledge for selection of appropriate techniques and methods to match learner situation, teacher personality, pupil needs, and subject for enhancement of learning. Preservice teacher must gain knowledge and skills in techniques and strategies for preparing interesting learning situations and stimulating thinking.

**412 Middle School Education/Curriculum (4)**

Prereq: 351 and admission to adv standing. *M. Johnson.* Concentrates specifically on the early adolescent. Special emphasis on uniqueness, philosophy, rationale, purpose, organization, and other related concepts essential to the development of a middle school education program.

**Professional Laboratory Experience (EDPL)****360 Field Experience in Elementary or Secondary Schools (2)**

Prereq: jr rank, perm. Observation and participation in elementary and secondary schools. Prior approval must be secured from Field Experience Office in May for those planning experiences in August-September period and in November for those planning participation in December. May be repeated.

**361 Field Service in Education (2)**

Prereq: soph rank. Participation in community agencies, summer camps, recreation programs, Head Start, and various school-related programs. Arrangements must be made in Field Experiences Office prior to participation.

**460 Observation and Participation in Elementary or Secondary Schools (3)**

Prereq: perm. *S. Bolden.* Extensive participation in school program extending over period of 1 qtr, designed primarily for students with some classroom teaching experience, especially students from other countries.

**461 Student Teaching in Elementary Schools (7)**

Prereq: perm. *S. Bolden, staff.* Assigned responsibility for teaching under supervision of master teacher in classroom in K-6 range for 1

qtr, full-time. Concurrent registration in 461, 462, and 465 is required of all elementary education, speech therapy, and special education majors. Concurrent registration in 461, 463, and 465 is required of majors in arts, music, and physical education.

**462 Student Teaching in Elementary Schools (6)**

Prereq: 461. Continuation of 461. See 461 for description.

**463 Student Teaching in Secondary Schools (6)**

Prereq: perm. *S. Bolden, staff.* Assigned responsibility for teaching under supervision of master teacher in classroom in 7-12 range for 1 qtr, full-time. Concurrent registration in 463-464-465 is required of all majors in secondary academic areas, home economics, and industrial arts. Majors in art, music, and physical education must register concurrently for 461, 463, and 465.

**464 Student Teaching in Secondary Schools (7)**

Prereq: 463. Continuation of 463. See 463 for description.

**465 Student Teaching Seminar (3)**

*S. Bolden, staff.* Analysis and interpretation of student teaching experience. Problem-centered discussion of major areas of concern directly related to classroom teaching. Structured discussion of unit and lesson planning, evaluation, classroom management, pupil adjustment, effects of recent legislation upon classroom teacher, position procurement, professional ethics, and professional organizations. Concurrent enrollment for 13 qtr hrs credit in student teaching required.

**466 Student Teaching for Advanced Students (6-9, max 9)**

Prereq: perm. *S. Bolden, staff.* Supervised observation, participation, and limited teaching; open only to elementary education degree candidates and selected secondary education and special education majors with a minimum of 3 yrs of prior teaching experience.

**Secondary Education (EDSE)****250 Analysis of Teacher Characteristics and Teaching Tasks (4)**

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250L, 270, and 270L. *K. Hillkirk, M. Johnson, R. Martin, E. Reid, R. Skinner, G. Wood.* Immediate focus on teaching tasks and models, training in systematic observation and analysis, peer teaching, and tools for self-analysis. Recommended that EDCI 275 or PSY 275 be taken concurrently with or following this course.

**250L Analysis of Teaching Characteristics and Teaching Tasks Field Experience (2)**

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 270, and 270L. *K. Hillkirk, M. Johnson, R. Martin, E. Reid, G. Wood.* Immediate focus on performance of undergraduate student in act of teaching in secondary school setting. Major emphasis on developing systematic skills in observation and analysis of teaching. Each student will work with cooperating teacher during qtr. Students will teach several micro-teaching lessons in schools. Session will be videotaped so students may analyze their teaching performance while viewing videotapes in clinical setting. Recommended that EDCI 275 or PSY 275 be taken concurrently with or following this course.

**270 Studies of the Learner: Development and Exceptionality (3)**

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 250L, and 270L or comparable field experience. *K. Hillkirk, R. Martin, E. Reid, J. Thompson.* Focus on study of human growth and development, both normal and exceptional, of preadolescents and adolescents. Major emphasis on effect of cognitive, physical, social, and emotional developmental changes on learner and on comprehensive survey of nature and educational needs of exceptional students.

**270L Studies of the Learner: Development and Exceptionality Field Experience (1)**

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 250L, and 270. *K. Hillkirk, R. Martin, E. Reid, J. Thompson, G. Wood, staff.* Field experience enables students to observe evidence of diversity in cognitive, physical, social, and emotional development during preadolescence and adolescence. Students observe and analyze characteristics of growth and development and exceptionalities in variety of field settings.



**297T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.

**298T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.

**299T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.

**351 Middle School Instructional Processes and Curriculum (5)**

Prereq: 250, 250L, 270, 270L, EDCI 275 or PSY 275, admission to jr standing. *A. Clubok, K. Hilkirk, M. Johnson.* To ensure that preservice teacher builds large repertory of teaching strategies and techniques. This learning experience will allow preservice teacher to gain sufficient knowledge for selection of appropriate techniques and methods to match learner situation, teacher personality, pupil needs, and subject for enhancement of learning. Preservice teacher must gain knowledge and skills in techniques and strategies for preparing interesting learning situations and stimulating thinking.

**397T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.; 297T and 299T.

**398T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.; 297T and 299T.

**399T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.; 297T and 299T.

**412 Middle School Education/Curriculum (4)**

Prereq: EDMS 351 and admission to adv standing. *M. Johnson.* Concentrates specifically on the early adolescent. Emphasis on uniqueness, philosophy, rationale, purpose, organization, and other related concepts essential to middle school education program.

**420 Teaching of Reading in the Content Areas (4)**

Prereq: 250, 270, EDCI 275 or PSY 275, 351, admission to jr standing. *A. Stalker.* Materials, methods, and techniques for teaching adolescent learners of various abilities. Emphasis on diagnosis of reading difficulties and adaptation of materials and teaching methods for content area instruction. Must be taken concurrently with 420L, and it is recommended that it also be taken at same time student is enrolled in special methods courses, if possible.

**420L Teaching of Reading in Content Areas: Field Experience Component (1-2)**

Prereq: 250, 270, 351, EDCI 275 or PSY 275, admission to jr standing; must be taken concurrently with 420. *A. Stalker.* Field experience to provide practical applications of materials, methods, and techniques of secondary reading instruction as appropriate in various secondary settings. Student will tutor assigned secondary school student in secondary school setting. It is recommended that 420 and 420L be taken at same time student is enrolled in special methods courses, if possible.

**470 Teaching of Bookkeeping and Basic Business (3)**

Prereq: 351 and ACCT 202. Materials, methods, and techniques in teaching bookkeeping and basic business subjects.

**471 Teaching Mathematics in Middle and Junior High School (3)**Prereq: 351. *L. Pitkaart.* Organization and methods of teaching subject matter of mathematics curriculum in grades 7 and 8. Number system studied.**472 Teaching of Earth Science (3)**Prereq: 351. *R. Skinner.* Instructional materials and techniques related to teaching earth science.**472L Field Experience (1-2)****478 Teaching of Physical Science (3)**Prereq: 351 and perm. *R. Mittas, R. Skinner.* Instructional materials, classroom methods, sources of lab equipment and supplies, and teaching techniques in physical sciences.**478L Field Experience (1-2)****479 Teaching of the Social Studies in Junior and Senior High Schools (3)**Prereq: 351. *A. Clubok.* Nature, development, purpose, and value of social studies, with emphasis on methods and techniques of instruction. Curriculum reorganization, unit planning, materials of instruction, and evaluation.**490 Studies in Secondary Education (1-5, max 15)**Prereq: perm of dept chair. *Staff.* Honors students or students seeking honors in secondary education may register for this course.**497T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.; 397T

**498T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.; 398T

**499T Secondary Education Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.; 397T and 399T

**Special Education (EDSP)****160 Field Experience in Special Education (Block I) (1)**Prereq: PSY 101 and 30 hrs with 2.5 g.p.a. Coreq with 271. *Staff.* Purpose of field experience is to provide training in observational techniques, observations of exceptional children in variety of settings, and simulations of exceptionalities.**260 Field Experiences in Special Education (Block II) (2)**Prereq: special education block I. *J. Yanok.* This course provides a practical, fieldbased, learning experience involving classroom observations and teacher-aiding activities. Over a 10-week period each student will be required to complete a minimum of 40 field work hours in an approved special education placement. Supervision and evaluation of this practicum will be performed by the University supervisor in consultation with the cooperating supervisory teacher.**270 Classroom Management of Children with Problem Behaviors I (3)**Prereq: special education block I. *M. Roth.* Develops teacher skills applicable in pre-student teaching, student teaching, and in professional teaching situation. Skills focused on emphasize behavior modification techniques with purpose of reducing behavioral problems, maximizing learning, and increasing pupil and teacher mental health. Procedures used will systematically move from teacher control to shared control with pupils and progressing to pupil self-control techniques.**271 Introduction to Education of Exceptional Children and Youth (3)**Prereq: Coreq with 160. *B. Reeves, S. Safran.* Comprehensive survey of special education programs emphasizing multidisciplinary approach, mainstreaming, and current trends in providing instruction to mentally retarded, learning disabled, behavior disordered, physically disabled, visually impaired, hearing impaired, communication problems, and gifted.**272 Introduction to Education of Mentally Retarded Children and Youth (3)**Prereq: special education block I or perm. *S. Sparks.* Etiology, diagnosis, classification, learning potential, and general characteristics of retarded child with emphasis on psychosociological impact of retardation upon individual, family, and community.**355 Microcomputers in Special Education (4)**

Prereq: 271 and EDM 332. Provides students with the knowledge and experience necessary to use microcomputers with special needs persons. Consideration given to the functionality of hardware, software, and peripherals available for use with special needs individuals in a variety of educational settings.

**360 Field Experiences in Special Education (Block III) (3)**Prereq: special education blocks I, II. *S. Sparks.* Field based course operating concurrently with and providing student with opportunities to apply skills and knowledges taught in professional courses in block III. Done through observation, participation, interview, tutoring, and group teaching in public schools and related agencies where DH children and youth are taught/trained.**361 Field Experience in Special Education (3)**Prereq: special education block II and jr standing in special education. *M. Roth.* Practical application of concepts and skills introduced in courses of special education block IIIb; supervising,

evaluating, managing, and teaching multihandicapped pupils. Students will have choice to work with preschool, school age, or adult retarded.

**370 Classroom Management of Children with Problem Behaviors (II) (3)**

Prereq: 270, special education block II or perm. *L. Jageman*. Furthers student knowledge and skills essential to working with LD/BD and DH children/youth. Includes individual and group interaction strategies, classroom management, organization, and techniques for effective teacher delivery, presentation, and feedback.

**371 Teaching the Preschool Handicapped (3)**

Prereq: special education block II or perm. *S. Sparks*. Purpose, organization, and methods utilized for education of handicapped children. Variety of program models and delivery systems covered.

**372 Language Development for the Handicapped (3)**

Prereq: special education block II or perm. *Staff*. Examination of language acquisition of handicapped children with primary emphasis on mental retardation. Methods and materials in evaluation and training of receptive and expressive oral language and alternative communication modes presented.

**373 Curriculum and Materials for the Exceptional Learner (4)**

Prereq: special education block I. *L. Jageman, J. Yanok*. An overview of the curriculum development process as well as guidelines and procedures for designing and analyzing comprehensive instructional programs appropriate to exceptional learners. Emphasis on preparation, selection, and implementation.

**374 Language Development and Adaptations for the Exceptional Learner (4)**

Prereq: special education block II. *J. Yanok*. This course examines normative and aberrant language acquisition patterns among children. Specifically, methodology for diagnosing and remediating the oral and written communication disorders of developmentally delayed students will be presented.

**375 Methods and Materials for Teaching Developmentally Handicapped Students (4)**

Prereq: special education block II. *S. Sparks*. Organization and methods of teaching in the area of developmental handicaps (DH). In addition to selection, planning, and teaching of appropriate units in the DH classroom, emphasis is on implementation of current theory and research to strengthen personal-social-vocational adjustment of DH children.

**376 Mathematics for the Mentally Retarded and Learning Disabled (4)**

Prereq: special education block III. *L. Jageman*. Organization, methodology, and materials for teaching basic math concepts and skills which have particular relevance to social and vocational adequacy of mentally retarded children and youth at all levels of instruction.

**377 Career and Vocational Education for the Exceptional Learner (3)**

Prereq: special education block II or perm. *J. Yanok*. This course presents a comprehensive overview of the continuum of vocational options for the handicapped at the secondary and post-secondary levels. Additionally, procedures for preparing exceptional persons to fulfill their career roles as family members, community residents, as well as workers, will be examined.

**378 Sheltered Workshop Organization (2)**

Prereq: special education block II or perm. *L. Jageman*. Organization and management of sheltered workshop with emphasis on training handicapped client and on production. Training will include evaluation, teaching, supervision, and community placement. Production includes contracts, product design, job layout, assembly, quality control, and work flow.

**379 Homemaking and Family Living for the Handicapped (3)**

Prereq: special education block II or perm. *L. Jageman*. Designed to develop understanding of objectives, organization, methods, materials, and programs essential to teaching handicapped persons self-care, homemaking, and family-living skills. Includes structured weekend field experience with adult retarded in residential group home.

**400 Nature and Needs of Severe Behavior Handicapped (3)**

Prereq: 271, PSY 101, or perm. *S. Safran*. Basic understanding of characteristics of severe behavior handicapped children. Topics

covered include conceptual models of disturbance/abnormal psychology, classification, withdrawal, hyperactivity (attention deficit disorders), aggression, juvenile delinquency, and intervention strategies. Both educational and psychological perspectives emphasized.

**401 Methods of Teaching the Severe Behavior Handicapped (4)**

Prereq: 400 or perm. *S. Safran*. Various methods of educating and treating severe behavior handicapped (SBH) children covered, including psychoeducational techniques, cognitive behavior modification, affective education, behavior management, and identification strategies.

**435 Recreation and Physical Education for the Mentally Retarded and Learning Disabled (5)**

Prereq: special education block II or perm. *Staff*. Preparation for presenting activities and evaluating mentally retarded and learning disabled children and youth in areas of body mechanics, physical fitness, games of low organization, sports, rhythms, stunts, tumbling, and recreation activities.

**460 Field Experience in Special Education (Block V) (3)**

Prereq: special education blocks I, II, III, IV. *B. Reeves*. Field-based experience designed to provide supervised practical experience through tutoring LD child or youth in public school setting. Field experience includes diagnostic-prescriptive teaching in areas of reading, arithmetic, and language arts.

**461 Field Experience in Special Education — Multiple Handicapped (Block IVb-MH certification) (3)**

Prereq: SP ED block IIb and jr. rank in special education. (spring) *M. Roth*. Practical application of concepts and skills introduced in special education block IVb courses. Application of curriculum and materials based on the needs of persons with multiple handicaps with particular emphasis on the future teachers individualized improvement plan.

**462 Field Experiences in Special Education (3)**

Prereq: 400; coreq: 401. Working directly in classes with students identified as severe behavior handicapped. Includes individual and small group instruction, development of comprehensive behavior management plans, teaching of affective education lessons, and other related experiences.

**473 The Nature and Needs of Persons with Multiple Handicaps (4)**

Prereq: special education block II and jr. rank in special education or perm. (winter) *M. Roth*. Course content and activities focus on the issues in the analyses of etiologies, characteristics, and diagnosis of multiple handicaps (including moderate, severe, profound mental retardation; orthopedic and sensory impairments; medical and behavioral disabilities), and the theoretical and therapeutic implications for transdisciplinary coordination of lifespan planning. Medical, communicative, psychosocial aspects; legal, ethical, and advocacy issues are studied in relation to the characteristics and needs of persons with multiple handicaps.

**474 Introduction to Specific Learning Disabilities (4)**

Prereq: special education block III and 75 hrs or perm. *B. Reeves*. Provides comprehensive overview of field of learning disabilities; introduces varied theories, controversies, and practices; discusses disciplines contributing to field, theoretical, and practical concepts of identification and diagnosis, specific learning disabilities, learning disabled adolescent, early identification, educational provisions, and impact on parents and family.

**475 Methods and Materials for Teaching Persons with Multiple Handicaps (4)**

Prereq: special education block IIb and jr. rank in special education or perm. (spring) *M. Roth*. Course content focuses on the design and implementation of multifaceted/transdisciplinary/ecological assessments, curricular adoption/development, IEP/IHP planning processes, functional instructional strategies that are age appropriate and delivered in naturalistic settings, adaptive materials and equipment, evaluation, and methods of structuring and arranging environments from a lifespan/interagency perspective for persons with multiple handicaps.

**476 Teaching the Learning Disabled (4)**

Prereq: special education block IV. *B. Reeves*. Provides training in strategies for teaching learning disabled students; developing individual diagnostic-prescriptive programs; utilizing specific in-

structional methodologies and materials; developing individual education programs; organizing instruction in LD classrooms; and evaluating student progress.

#### 477 Communicating with Parents and Professionals in Special Education (4)

Prereq: special education block IV or IIIb or perm. *M. Roth, S. Sparks*. Designed to develop understanding of stresses of parenting exceptional child and how to establish professional relationship with parents so as to strengthen parent effectiveness and involvement. Includes overview of communication techniques, professional roles, and community resources.

#### 478 Education of the Disadvantaged and Handicapped (3)

Prereq: admission to jr rank in teacher education. *Staff*. Problems and new approaches to education of disadvantaged children handicapped through intellectual, sensory, perceptual, and communication deficits due to environmental factors.

#### 481 Management of Medical and Physical Problems in the Classroom (3)

Prereq: special education block IIIb or perm. *L. Jageman*. Understanding medical conditions and terminology pertinent to reading accumulative folder information, communicating with parents and interdisciplinary team members, and in planning and implementing Individualized Habilitation Plan. Classroom procedures to use with children having ostomies, shunts, pacemakers, glasses, hearing aids, braces, seizures, medication, etc. emphasized.

#### 485 Diagnosis and Evaluation of the Handicapped (3)

Prereq: special education blocks I, II, III. *Staff*. Designed to have student learn types, purposes, and appropriateness of various testing and evaluation tools and techniques. Moreover, covers analysis, interpretation, and reporting of assessment information.

#### 490 Study of Special Education (1-5, max 15)

Prereq: perm of area coordinator. Independent analysis of problems, special interests, concerns, with assigned and suggested readings, programmed experiences, and preparation of final report, with guidance of staff member.

## ELECTRONICS TECHNOLOGY

The following courses for the A.A.S. program in electronics technology are available only on the Lancaster campus.

#### 110 Basic Electronics (5)

Prereq: MATH 101. Provides student with introductory knowledge of electricity and solid state electronics. Basic electrical terms, units, symbols, schematics, and code. Fundamentals of alternating current and direct current electricity. Ohm's Law applied to series and parallel networks. Inductance and capacitance theory. Test equipment used for troubleshooting. Fundamentals of solid state theory and application. Operating characteristics of diodes, transistors, and I.C.s. Concludes with introduction to computers and microprocessors. 3 lec, 4 lab.

#### 111 A.C. and D.C. Circuit Analysis (5)

Prereq: 110, MATH 113, or perm. A.C. and D.C. electrical circuits. Application of network theorems to circuits containing resistors, capacitors, inductors, and transformers emphasized.

#### 112 Industrial Electronics (6)

Prereq: 111 or perm. Advanced study of solid state devices, their operating characteristics, and circuit analysis. Transistor amplifiers, bias, impedance matching and classes of operation, integrated circuit theory, and application. 3 lec, 6 lab.

#### 120 Digital Electronics (6)

Prereq: 111 or perm. Comprehensive study of pulse and digital circuits used in industry. Wave shaping, switching circuits, trigger circuits, nonsinusoidal oscillators, and sequencing systems. Digital concepts. Boolean algebra, logic circuits, memory circuits, arithmetic unit, and logic application to electronic control circuits. Field trips part of lab activity. 3 lec, 6 lab.

#### 134 Direct Current Circuit Analysis (5)

Prereq: 110. Direct current electrical theory, application, and circuit analysis. 3 lec, 4 lab.

#### 135 Alternating Current Circuit Analysis (5)

Prereq: 134, MATH 115/118, or perm. Alternating current electrical theory, application, and circuit analysis. Sinusoidal wave forms, inductive reactance, resonance circuits, and RC circuits. Power transformers and polyphase systems. Power generation and distribution. 3 lec, 4 lab.

#### 140A-J Power Distribution Systems (1-5, max 5 each segment)

Prereq: 135 or perm. (A) residential electrical wiring, (B) commercial electrical wiring, (C) industrial electrical wiring, (D) National Electrical Code, (E) low-voltage wiring, (F) high-voltage systems, (G) fire alarm systems, (H) electrical safety, (I) electrical blueprints and specifications, (J) new developments in power distribution.

#### 220 Electrical Motors, Control Circuits, and Computers (5)

Prereq: 111 or perm. Industrial power rotating machines and computer control. Motor principles, classification, and application. Motor control circuits, single phase, 3-phase systems, relays, and overload protection. Testing and maintenance procedures. Field trips part of lab activity. 3 lec, 4 lab.

#### 221 Programmable Controllers, Instrumentation & Process Control (4)

Prereq: 220 or perm. A study of process control including transducers and controller principles. Emphasis on instrumentation, programmable controllers, and analog and digital control of the manufacturing process. 2 lec, 4 lab.

#### 234 Industrial Electronics and Linear Integrated Circuits (5)

Prereq: 112 or perm. Theory and application of solid state industrial control. Silicon control rectifiers, photoelectric, differential amplifiers, oscillators, and phase shift controls. 3 lec, 4 lab.

#### 236A Microprocessor and Computer Basics (6)

Prereq: 120 or perm. Introduction to computer organization and design, including ROMs, RAMs, microprocessors, instruction sets, hardware, software, and machine and assembly language programming. 3 lec, 6 lab.

#### 236B Microprocessor and Computer Basics (6)

Continuation of 236A. Emphasis is on computer interfacing.

#### 236C Robotics (6)

Prereq: 236B or perm. Introduction to fundamentals of robotics. 3 lec, 6 lab.

#### 237 Design and Production of Electronic Circuits (3)

Prereq: 110 and IT 101 or perm. Printed circuit theory, design, application, and fabrication. 2 lec, 2 lab.

#### 240A-M Electronic Communication Systems (3-5)

Prereq: 233 or perm. Introduction to various types of communication systems. Includes microwave, R. F., television, audio, and sound systems.

#### 250 Computer Programming for Electronic Circuit Analysis (3)

Prereq: 112, MATH 115/118, or perm. Introduction to high-level language programming for solution of electronic circuit problems. 2 lec, 2 lab.

#### 260 Data Communications and Computers (4)

Prereq: 236B or perm. A study of computer communications systems, including telecommunications. Topics include modems, amplifiers, local area networks (LANs), communication standards, and protocols. An introduction to the principles of radio, television, telephone, and digital networks will also be studied. 2 lec, 4 lab.

#### 288 Personal Computer Maintenance (4)

Prereq: 236B or perm. Repair and trouble shooting of the personal computer emphasizing the IBM series. Topics will include specifications, documentations, timing diagrams, diagnostic programs, test instruments, logic analyzers, and in-circuit emulation. Other personal computers may be considered. 2 lec, 4 lab.

#### 289 Electronic Trouble Shooting and Repair (3)

Prereq: 112 and 120 or perm. (Formerly ETCH 200) Fundamentals of test equipment applications with emphasis on repair of consumer and industrial equipment, including computers. 1 lec, 4 lab.

#### 299 Special Problems (1-3, max 9)

Prereq: perm. Individualized projects or internship experiences under supervision of faculty member in electronics technology.

## ENGINEERING, CHEMICAL

### 200 Introduction to Chemical Engineering (4)

Prereq: CHEM 122 or 152, MATH 263A. (fall, spring) Applications of chemistry, physics, and mathematics to solution of material and energy balances typical of those encountered in process industries. 3 lec, 2 lab.

### 305 Chemical Engineering Thermodynamics I (5)

Prereq: 200, C or better. Application of thermodynamics to chemical engineering problems, including problems in chemical equilibrium in homogeneous and heterogeneous systems, mixtures, and pure materials.

### 306 Chemical Engineering Thermodynamics II (2)

Prereq: 305, ET 240. Continuation of 305. See 305 for description.

### 307 Chemical Engineering Kinetics I (2)

Prereq: 306, or with 306, 342, 400, or with 400. Application of chemical kinetics and material and energy balances to the design of chemical reaction systems.

### 308 Chemical Engineering Kinetics II (4)

Prereq: 306, 307, 344, 400. Continuation of 307. See 307 for description.

### 331 Principles of Engineering Materials (4) (2A)

Prereq: CHEM 122 or 152. (fall, spring, summer) Fundamental principles underlying behavior of engineering materials. Relationship between structure and properties of ceramic, metallic, and polymeric materials. 4 lec.

### 342 Unit Operations I (5)

Prereq: 200 (C or better), MATH 340. (fall) Fundamental principles of fluid flow, heat, and mass transfer.

### 343 Unit Operations II (4)

Prereq: 342, 344. (spring) Stagewise processes including distillation and extractions. 3 lec, 2 lab.

### 344 Unit Operations III (5)

Prereq: 342. (winter) Continuation of 342. See 342 for description. 4 lec, 2 lab.

### 400 Applied Chemical Engineering Calculations (5)

Prereq: ET 240, MATH 340. (winter) Solution of ordinary differential equations of chemical engineering, numerical methods, Laplace transforms, computer synthesis and analysis, unsteady heat transfer, partial differential systems.

### 415 Chemical Engineering Lab III (3)

Prereq: 343, 344, sr rank. (winter) Lab practice to illustrate principles of selected unit operations, thermodynamics, and applied kinetics; and to aid student in gaining confidence in handling of chemical engineering equipment. Development of ability to devise and conduct chemical engineering experiments with minimum supervision and to report results satisfactorily stressed.

### 416 Chemical Engineering Lab IV (3)

Prereq: 343, 344, sr rank. (fall) Continuation of 415. See 415 for description.

### 417 Chemical Engineering Lab V (2)

Prereq: 442 or with 442. (fall) Continuation of 442. 1 lec, 2 lab.

### 418 Chemical Engineering Lab VI — Materials (2)

Prereq: 331. (fall, winter, spring, summer) Demonstrations and experiments supporting relationships which exist between structure and properties of ceramic, metallic, and polymeric materials. 4 lab.

### 419 Chemical Engineering Lab VIII — Advanced Materials (1-3)

Prereq: perm. Individual and small group investigation of advanced problems involving chemical, mechanical, physical, or design parameters of materials, materials structure, or fabrication. Investigations may involve ceramics, metals, polymers, or composites. 2 lab for each hr of credit.

### 421 Unit Processes (3)

Prereq: 344, with 344, or perm. (spring) Typical inorganic and organic processes, with emphasis on application of thermodynamic and kinetic theory and on raw material and energy sources to design and operation of these processes. 3 lec.

### 430 Metallic Corrosion (4)

Prereq: 331. (spring) Basic principles of corrosion including electrochemical foundation, influence of environment, stress, strain, and structure. Selected lab experiments. 4 lec.

### 433 Physical Metallurgy (4)

Prereq: 331. Mechanisms, kinetics, and crystallography of reactions in metallic solids. Selected lab experiments for illustration of principles. 4 lec.

### 442 Process Control and Simulation (4)

Prereq: 344, 400. (fall) Simulation and control of chemical processes. Feedback control using root loci and Bode diagrams covered. 4 lec.

### 443 Chemical Engineering Design (5)

Prereq: 343 & 344 or perm. (fall) Preliminary process design of chemical plant and its economic evaluation plus additional detail design problems. Involves trip, which usually lasts 3 days, to various chemical plants. Student responsible for own expenses on this trip. 3 lec, 2 rec.

### 444 Chemical Engineering Design (4)

Prereq: 443. (winter) Continuation of 443. See 443 for description.

### 445 The Application of Engineering Design to the Environment (3)

Prereq: 443 or perm. Use of chemical engineering fundamentals to approach socially significant problem. Students expected to research problem and come up with definite specific solutions which they will then evaluate. 3 lec.

### 452 Introduction to Transport Phenomena (3)

Prereq: 343, 344, 400. Heat, mass, and momentum transfer from theoretical viewpoint. Presentation of boundary-layer theory and its comparison with other theoretical and semi-theoretical approaches. 3 lec.

### 460 Atmospheric Pollution Control (3)

Prereq: 305, 306 or ME 321 or perm. Sources of air pollution from major industries, internal combustion engines, and other sources. Techniques available for measuring particulate and gaseous pollutants in atmosphere and at their sources. Techniques available for control and future possibilities for control of air pollution. Bases for air pollution legislation. 3 lec.

### 461 Environmental Assessments (3)

Prereq: perm. Determining whether emissions to air, land, or water are likely to be dangerous to people or environment. Air Transport Models developed by EPA for determining ambient ground concentrations resulting from emissions from various sources will be discussed. How to run risk analysis for dangerous substances.

### 477 Introduction to Polymer Synthesis (4)

Prereq: CHEM 305, or with CHEM 305, or perm. To develop thorough understanding of mechanisms, kinetics, and systems used for synthesis of polymeric materials. Effect of synthesis variations upon properties and reactor design also discussed.

### 490 Special Investigations (1-3, max 9)

Prereq: perm. Individual or small-group work, under staff guidance, in research or advanced study in particular field of chemical engineering.

### 491 Chemical Engineering Honors (1-18, max 20)

Prereq: 3.5 accum or above, satisfactory departmental evaluation of potential. Independent departmental honors research resulting in thesis. Credit/noncredit.

## ENGINEERING, CIVIL

### 210 Plane Surveying (4)

Prereq: Any calculus course or perm. (fall, spring) Basic theory and field practice in measurement of distance, elevation, and angle; Introduction to photogrammetry. 3 lec, 3 lab.

### 220 Statics (4)

Prereq: MATH 263D or with MATH 263D. Laws of equilibrium of forces, friction, centroids, and moment of inertia. 4 lec.

**222 Strength of Materials (4)**

Prereq: grade of C or better in 220. Simple stresses and strains, bending, torsion, beam deflection, columns, and combined stresses. 4 lec.

**223 Strength of Materials Laboratory (1)**

Prereq: 222 or with 222. Testing of various materials under axial compression, tension, flexure, torsion, impact, fatigue. Use of electrical, mechanical, and photoelastic strain measuring equipment. 2 lab.

**301 Applied Mechanics (5)**

Prereq: MATH 263D, PHYS 251. Not open to students who have completed CE 220 or CE 222. Calculus-based terminal course in applied mechanics for students outside the civil or mechanical engineering programs. Concurrent and non-concurrent force systems at rest. Internal response of deformable bodies to external loads. 5 lec.

**311 Route Engineering (4)**

Prereq: 210. (winter) Horizontal and vertical curves; geometric design of highways; earthwork distribution; introduction to engineering economy. 4 lec.

**330 Structural Theory I (5)**

Prereq: minimum grade of C in 222, ET 240. (fall) Determinacy requirements; analysis of statically determinate structures; influence lines; deflections; introduction to analysis of statically indeterminate structures. 5 lec.

**331 Structural Theory II (3)**

Prereq: minimum grade of C in 330. (winter) Indeterminacy conditions for structures; slope deflection method; moment distribution method; influence lines; introduction to computer methods. 3 lec.

**340 Fluid Mechanics (5)**

Prereq: grade of C or better in ME 224. Statics and dynamics of viscous and nonviscous fluids, dimensional analysis and similitude. 1-dimensional gas dynamics, pipe flow, principles of lift and drag, introduction to boundary layers. 5 lec.

**341 Fluid Mechanics Laboratory (1)**

Prereq: 340 or with 340. Lab techniques, calibration principles, fluid and flow measurements. 2 lab.

**342 Applied Hydraulics (3)**

Prereq: 340. (spring) Flow and pressure distribution in multiloop networks, dynamics of flow in pumps and turbines, uniform and nonuniform flow in open channels, culvert hydraulics, hydraulic transients. 3 lec.

**343 Hydrology (3)**

Prereq: 340, ISE 304 or with ISE 304. (spring) Hydrologic cycle. Precipitation and runoff data; groundwater hydraulics; infiltration; peak runoff calculations. Application to water resource problems. 3 lec.

**361 Transportation Engineering (3)**

Prereq: 311. (spring) Comparative analysis of various modes of transportation, with emphasis on inherent advantages and disadvantages of each; planning process applied to transportation facilities. 3 lec.

**370 Soil Engineering (4)**

Prereq: 340 or concurrent with 340, 222, GEOL 283. (winter) Soil compositions, physical and chemical properties, and classifications; water movement and seepage problems; consolidation and shear strength; applications to earth structures, retaining walls, slope stability, bearing capacity, and settlement. May be taken as 570 for grad credit except by civil engineers. 3 lec, 2 lab.

**410 Surveying II (3)**

Prereq: 210. (spring) Triangulation; astronomical observations; land surveying; instrument adjustments; special topics. 2 lec, 3 lab.

**415 Photogrammetry (3)**

Prereq: 210 or perm. (winter) Equipment and methods used in aerial photography and land measurement. 2 lec, 2 lab.

**423 Continuum Mechanics (4)**

Prereq: perm. (spring) Matrix methods in mechanics and structures; laws of dynamics; mechanical properties of solids and fluids; basic theories of continuum mechanics. Grad-level course open to selected undergrads. 4 lec.

**424 Strength of Materials II (3)**

Prereq: C or better in 222. (fall) Unsymmetrical bending, shear centers, columns, energy, and continuation of basic topics usually taught in Strength of Materials I. 3 lec.

**427 Experimental Stress Analysis (3)**

Prereq: 424. (spring) Experimental methods of stress determination including photoelasticity, stress coat, and electric strain gauge techniques; stress analogies; strain rosettes for combined stress determinations. Grad-level course open to selected undergrads. 2 lec.

**431 Experimental Methods in Structural Dynamics (3)**

Prereq: perm. Modal analysis of structural models to identify their vibration characteristics. Frequency response functions using dual-channel signal analyzers. Mobility measurement techniques. Modal parameter extraction techniques. Computer-aided structural dynamics. Grad-level course open to selected undergrads. 2 lec, 3 lab.

**432 Structural Design in Concrete (4)**

Prereq: minimum grade of C in 330. (winter) Materials and properties; design methods, strength of rectangular sections subject to bending moments, axial loads, and shear forces either separately or in combination; continuity in concrete construction; design of 1-way slabs; design of T-sections in bending; deflection calculations; footing design. 4 lec.

**433 Structural Design in Steel (4)**

Prereq: minimum grade of C in 330. (spring) Materials and properties; design methods, design of tension members; structural fasteners; welding; design of compression members, beams, connections, trusses, frames, plastic design of beams and frames. 4 lec.

**434 Structural Design (3)**

Prereq: minimum grade of C in 330. (spring) Design of complete structures or major components of structures. 3 lec.

**438 Structural Dynamics (3)**

Prereq: 330, ME 491, and perm. Dynamic analysis of structures with multi-degree of freedom. Free and forced vibration analysis of elastic beams, frames, grids, and trusses. Earthquake and wind-induced vibration of high-rise buildings and bridges. Classical and computer methods. Grad-level course open to selected undergrads. 3 lec.

**445 Flow Routing (3)**

Prereq: 342 or perm. (fall) Chang. Gradually varied flow computation, the use of computer software programs for flow routing, and their engineering applications.

**450 Water Treatment (3)**

Prereq: 342, 343, CHEM 123. (fall) Sources and collection of public water supplies; principles of treatment processes. 3 lec.

**451 Wastewater Treatment (3)**

Prereq: 342, 343, CHEM 123. (winter) Quantities and collection of municipal wastewater; principles of treatment processes. 3 lec.

**452 Water and Wastewater Analysis (3)**

Prereq: CHEM 123. (fall) Lab methods and interpretation of results for chemical and bacteriological examination of water and wastewater. 2 lec, 3 lab.

**457 Water Resources Engineering (3)**

Prereq: 343 or perm. (winter) Elective sr civil engineering course designed to provide integrated treatment of water resources engineering, including hydrological measurements, runoff, ground water, water law, reservoir design, frequency analysis, planning, flood control. Systems approach to multipurpose water resource projects emphasized. 3 lec.

**458 Water Quality Engineering (3)**

Prereq: perm. (spring) Natural and man-made characteristics of water quality, changes in quality resulting from use, criteria for control of stream pollution, methods of improving water quality, also legal, economic, and institutional aspects. Grad-level course open to selected undergrads. 3 lec.

**462 Traffic Engineering (3)**

Prereq: 361, nonmajors by perm. (winter) Vehicle and driver characteristics, uses of traffic control devices, intersection design and capacity, parking characteristics. 3 lec.

**471 Foundation Engineering (3)**

Prereq: 370. (fall) Design and construction problems in soil engineering; subsurface investigation, foundation selection and design criteria; principles of design of shallow and deep foundations; site improvement. 3 lec.

**474 Soil Mechanics Laboratory (1)**

Prereq: perm. (spring) Advanced techniques for measurement of soil engineering properties. Grad-level course open to selected undergrads. 3 lab.



**481 Pavement Design (3)**

Prereq: perm. (spring) Types and uses of various paving materials and mixtures; theory and practice in design, construction, and maintenance of various types of highway and airport pavements. 2 lec, 2 lab.

**482 Paving Materials and Mixtures (3)**

Prereq: perm. (winter) Types, constituents, chemical behavior, tests, specifications, and uses of bituminous materials, Portland cements, and aggregates in pavements. Design and manufacture of paving mixtures and construction of pavements. Grad-level course open to selected undergrads. 2 lec, 3 lab.

**490 Special Investigations (1-5)**

Prereq: perm. Special investigation or problems not covered by formal courses. Permits well-qualified student to pursue individual study under direction of faculty member.

**491A Senior Design-Land Use (4)**

Prereq: 343, 361, or perm. An advanced applied engineering course utilizing multiple fundamental civil engineering courses as applied to land utilization.

**491B Senior Design—Environmental/Water Resources (4)**

Prereq: 450, with 451, or perm. An advanced applied engineering course utilizing combinations of water/wastewater treatment and hydraulics/hydrology courses as applied to societies' needs.

**491C Senior Design—Structures and Foundations (4)**

Prereq: 370 and 432 or 433, or perm. A civil engineering design elective integrating fundamental civil engineering courses for foundation and structural design, analysis, and drawing.

## ENGINEERING, ELECTRICAL AND COMPUTER

**NOTE:** In the following course descriptions an asterisk (\*) denotes that a minimum grade of C is required in prerequisite course.

**200 Introduction to Personal Computers for Engineers (0)**

Prereq: 210 and ET 240. Introduction to personal computer applications in electrical engineering. Tutorial on software packages that will be utilized in engineering coursework. Personal computer operating system fundamentals. FORTRAN, circuit analysis software, word processing, spreadsheets, and data base applications will be investigated.

**210 Circuit Analysis I (4)**

Prereq: MATH 263B\*. (fall, winter) Basic concepts and definitions, units, DC circuit analysis, Kirchhoff's laws, source transformations, mesh and nodal analysis, network theorems, magnetic circuits.

**211 Circuit Analysis II (4)**

Prereq: 210\* and MATH 263C. (winter, spring) Continuation of 210. Inductance and capacitance, initial conditions, periodic functions, average and RMS, complex numbers, phasors, sinusoidal steady state circuit analysis, plus polyphase circuits.

**212 Circuit Analysis III (4)**

Prereq: 211\* and MATH 340. (fall, spring) Continuation of 211. AC network theorems, coupled circuits, frequency response, transient circuit analysis, two port networks, complex frequency, and transformers.

**221 Instrumentation Laboratory (2)**

Prereq: 210 and/or with 211. (winter, spring) Theory and applications of lab instruments. Lab experimentation involving electrical and magnetic phenomena.

**222 Introduction to Digital Circuits (3)**

Prereq: 210\*, ET 181. (spring, fall) Fundamentals of Boolean algebra; binary arithmetic; characteristics and applications of logic gates and flip-flops; introduction to microcomputers.

**232 Analytical Foundations of Electrical Engineering (5)**

Prereq: 211\*, MATH 340, ET 240. (spring, fall) Vector analysis with applications to electromagnetic fields. Matrix theory with applications to state variable formulation of linear and nonlinear systems. Complex variable theory with applications to systems, in preparation for Laplace transforms, etc. Special analytical techniques for solution of complex electrical engineering problems with emphasis on computer-oriented techniques.

**301 Intermediate Laboratory I (1)**

Prereq: 221 and/or with 340. Intermediate-level lab in practical electronics designed to provide exposure to devices and circuits discussed in corequisite lecture course.

**302 Intermediate Laboratory II (1)**

Prereq: 301 and/or with 341. Continuation of 301.

**303 Intermediate Laboratory III (1)**

Prereq: 367. Experiments in microprocessors and electronics.

**304 Basic Electrical Laboratory I (1)**

Prereq: 313 or with 313. Lab supplement to 313. Basic instruments and circuit measurements.

**305 Basic Electrical Laboratory II (1)**

Prereq: 304 and/or with 314. Lab supplement to 314. Operation of semiconductor devices, amplifier design, oscillators and digital circuits design.

**310 Linear Systems and Networks I (4)**

Prereq: 212\*. (fall, winter) Classifications of systems and signals, basis functions, singularity functions, convolution integral, Fourier series and transforms, Laplace transformation with associated theorems. Students assigned to use digital computer for solving Fourier series problem and therefore they should have some knowledge of FORTRAN programming.

**312 Linear Systems and Networks II (4)**

Prereq: 310. (winter, spring) Review of Laplace transforms; sampling continuous time signals; frequency response; discrete-time signals and systems; Z-transforms; solving state variable equations.

**313 Basic Electrical Engineering I (3)**

Prereq: MATH 263B, PHYS 252. DC, steady-state single phase AC, 2-port network analysis, frequency and transient response. Not open for credit to electrical engineering majors. 3 lec.

**314 Basic Electrical Engineering II (3)**

Prereq: 313. Semiconductor devices, small-signal analysis, amplifiers and oscillator circuits, pulse and digital circuits. 3 lec.

**315 Basic Electrical Engineering III (3)**

Prereq: 313. Transformers, direct current machines, polyphase induction and synchronous rotating machines, including equivalent circuits and steady state performance prediction.

**321 Electromagnetics and Materials I (5)**

Prereq: 212\*, 232\*. (fall, winter) Introductory treatment of static electric and magnetic fields in free space and stationary matter and physical properties of fields, charges, and currents. Included are: electromagnetic field vectors and field equations, boundary conditions, Poisson's equation, solutions of Laplace's equation for scalar electric and magnetic potentials, vector potential, polarization and magnetization charges and currents, and unified macroscopic treatment of fields in matter. Electromagnetic energy.

**322 Electromagnetics and Materials II (5)**

Prereq: 321. (winter, spring) Continuation of 321. Discussion of time-varying, electromagnetic fields. Application of field theory to solution of problems from various branches of electrical engineering with emphasis upon physical interpretation. Included are: relation of field theory to circuit theory, Poynting's theorem, stored energy and power flow, complex fields and power, TEM waves, uniform plane wave, wave reflection and refraction. Theory and applications of transmission lines.

**335 Energy Conversion (5)**

Prereq: 321. (spring, fall) Basic principles of electromechanical energy conversion. Circuit models and parameter tests for single-phase and 3-phase transformers. Fundamentals of DC machinery: circuit models and characteristics of DC motors. Fundamentals of AC machinery: theory and operation of synchronous machines and induction motors.

**340 Electronics I (5)**

Prereq: 212\*, 222, PHYS 252. (fall, winter) Introduction to semiconductor properties, devices, and applications. Formation of n- and p-type materials, junctions. Properties of diodes and bipolar transistors. Application of semiconductor devices to digital circuits. Introduction to combinational and sequential logic.

**341 Electronics II (4)**

Prereq: 232\*, 340. (winter, spring) Continuation of 340. Application of semiconductor devices to analog circuitry. Small-signal parameters, low-frequency amplifier design, feedback amplifiers, frequency response. Large-signal amplifiers and power supplies.



**367 Introduction to Microprocessors (4)**

Prereq: 340 and ET 240 (winter, spring) Basic system organization of microcomputers including I/O interfacing. Assembly language programming of 8 bit microprocessors from elementary operations through subroutines and interrupt processing. Emphasis upon programming for I/O applications involving interaction, monitoring, and control.

**371 Applied Probability and Statistics for Electrical Engineers (3)**

Prereq: 312 (fall, spring) An introduction to fundamental concepts from probability and statistics, emphasizing problem-solving skills and electrical engineering applications.

**381 Internship in Electrical Engineering (1-3)**

Prereq: jr rank and perm. Supervised work-study program, in electrical engineering profession, in established industrial environment. Credit dependent on advanced registration and mutual agreement between faculty supervisor and participating company. May be repeated; however, hrs applied for graduation limited by dept.

**401 Advanced Laboratory I (1)**

Prereq: 302 or perm. (fall, winter, spring) Advanced lab format follows that of intermediate lab. Student-proposed projects are design or research-oriented and directed by faculty member specializing in area of investigation. Portion of this lab required in conjunction with certain electrical engineering 400 level lecture courses.

**402 Advanced Laboratory II (1)**

Prereq: 302 or perm. (fall, winter, spring) See 401 for description.

**403 Library Research (1)**

Prereq: perm. (fall, winter, spring) Library research under the supervision of a faculty member. Prior approval required. See departmental office for regulations.

**405 Physical Electronics (3)**

Prereq: 340. Simplified 1-dimensional band theory of solids. Valence and conduction band occupancy from Fermi-Dirac statistics. Hole conduction and doping. Derivation of PN junction volt-amp-temperature characteristic. DC and AC characteristics of junction transistors derived from fundamentals.

**406 Advanced Analog Circuits (3)**

Prereq: 312, 341, 301, and 302. Advanced analog circuitry. Operational amplifiers, characteristics, limitations. Linear and nonlinear applications. Feedback, stability criteria, compensation, time, and frequency response. Waveform generation and shaping, timing, comparison, arithmetic operations.

**407 Advanced Digital Circuits (3)**

Prereq: 312, 341, 301, and 302. Advanced digital circuitry. Basic logic operations, digital device families, and characteristics. Arithmetic, counting, memory, other MSI and LSI functions. Numeric display devices. Analog/digital conversion.

**410 Semiconductor Principles I (3)**

Prereq: 405 or equiv. Continuation of 405. Application of semiconductor theory to solid state devices: diodes, transistors, FETs, and Gunn effect devices. Charge control analysis; Ebers-Moll equations; electro-optical effects.

**411 Analog Filters I (3)**

Prereq: 312 and 232. (fall) Principles of filter synthesis, positive-real functions, synthesis of 1-port networks, synthesis of 2-port networks, approximation, frequency transformations, and filter design.

**412 Analog Filters II (3)**

Prereq: 411, or perm. (winter) Principles of active filter synthesis, active filter elements, realization of active 2-port networks, multiple feedback filters, explicit formulas and practical filter design. Sensitivity and non-ideal filter elements. Switched capacitor filters.

**413 Digital Filter Design (3)**

Prereq: 412, or perm. (spring) Principles of digital filter design, Z-transform, discrete Fourier transform, representations of digital filters, digital filter hardware implementations, and computer-aided design of digital filters.

**415 Introduction to VLSI (3)**

Prereq: 312, 341. Introduction to very large scale integration (VLSI) technology and design of CMOS integrated circuits. VLSI fabrication process; design rules; logic design; performance estimation; chip engineering; computer aids to VLSI design. Students may get 2 hours of senior lab credit for the VLSI lab work. 3 lec, 2 lab.

**425 Control Theory I (3)**

Prereq: 312. (fall) Formulation of Models for lumped parameter systems, fundamental principles of closed loop control, signal flow graphs, stability, Routh Hurwitz criterion, root locus construction, specifications, and design via root locus.

**426 Control Theory II (3)**

Prereq: 425. (winter) Simulation, Bode plots, frequency response performance specifications and relationship to time domain specifications, Nyquist criterion, relative stability measures, closed loop frequency response, analytical design of lead, lag, lag-lead, and PID compensators.

**427 Control Theory III (3)**

Prereq: 426. (spring) Sampling and data reconstruction, discrete-time systems, z-transforms, sampled data systems, frequency response, Nyquist criterion, analytical design of lead, lag, lag-lead, and PID compensators.

**431 Introduction to Lasers I (3)**

Prereq: 322. Introduction to important modern optical devices and lasers and their applications. Emphasizes basic physical theory needed to understand lasers, their construction, and their applications. Detailed discussion of various types of lasers and their characterization.

**432 Introduction to Lasers II (3)**

Prereq: 431. Continuation of 431. Additional theoretical material discussed beginning with Maxwell's equations. Examines electromagnetic issues that play major role in laser oscillations — amplification and feedback. Characterization of lasers and continuing discussion of laser types and their applications.

**433 Optoelectronic Materials and Devices (3)**

Prereq: 405. Introduction to modern optical materials and devices utilizing semiconductor technology; optical integration of these devices and their application in diverse fields. Fundamentals of devices and materials emphasized.

**440 Microwave Theory and Devices (3)**

Prereq: 322. Wave propagation, transmission lines, Smith chart, impedance matching, waveguides, survey of devices (microwave generators, semiconductor devices, etc.).

**441 Antennas (3)**

Prereq: 322. Fundamental concepts and definitions, radiation integrals and potential functions, linear wire antennas, loops, arrays, personal computer applications.

**443 Electromagnetics I (3)**

Prereq: 322. (fall) Mathematical review of vector operations in Cartesian and curvilinear coordinates. Solution of wave equation in Cartesian coordinates and application to wave reflection from interfaces between general media. Decomposition of wave solutions into TE, TM, and TEM waves, with application to waveguides and transmission lines; solution of wave equation in cylindrical coordinates, with application to circular waveguide, radiation from line sources, and scattering from cylindrical objects.

**446 Introduction to Radar and Aircraft Navigation Systems (3)**

Prereq: 322. (fall) Discussion of radar as applied to aviation requirements of surveillance, approach and landing, weather avoidance; presentation of principles of VOR, DME, RNAV, ILS, ADF, Loran, Omega.

**447 Introduction to Avionics (3)**

Prereq: 446. Intermediate study of radiation patterns and modulation techniques required for UHF/VHF aircraft communications and enroute and approach guidance. Extension of VHF instrument landing systems (ILS) to microwave landing system (MLS) presented.

**454 Power Electronics (3)**

Prereq: 335, and 341. Introduces seniors to power electronics. Covers most uses of semiconductor devices for the conversion and control of electric power: ac to dc; ac to ac; dc to dc; dc to ac conversions; and dc and ac motor drives. Semiconductor device characteristics (particularly those characteristics not stressed in 340 and 341) and device protection conclude the offering.

**455 Introduction to Electric Power System Engineering and Analysis I (3)**

Prereq: 335. Includes power system representation, computer methods, symmetrical components, protection methods, and stability.

**456 Introduction to Electric Power System Engineering and Analysis II (3)**

Prereq: 455. Continuation of 455. See 455 for description.

**457 Introduction to Electric Power System Engineering and Analysis III (3)**

Prereq: 456. Continuation of 455, 456. See 455 for description.

**461 Digital Systems I (3)**

Prereq: 341. (fall) Postulates and fundamental theorems of Boolean algebra; algebraic and map methods for design of combinational logic and simple sequential circuits; logic minimization methods; introduction to system design using shift registers, counters, etc.

**462 Digital Systems II (3)**

Prereq: 461. (winter) Basic concepts from theory of finite-state machines; analysis and synthesis of sequential circuits; study of state assignment; synchronous and asynchronous machines; system design using integrated circuits.

**463 Digital Systems III (3)**

Prereq: 462. (spring) Synthesis of sequential circuits using ROMs and RAMs for control logic. Introduction to computer organization and design including selection of instruction set, register and bus organization, and implementation of control logic with micro-programmed control.

**467 Advanced Microprocessors I (3)**

Prereq: 367. Organization of 16 and 32-bit microprocessors. Particular attention given to a specific microprocessor family (such as the Motorola 680XY) regarding instruction set, assembly language programming, arithmetic operations, I/O, etc.

**468 Advanced Microprocessors II (3)**

Prereq: 467. Continuation of 467.

**470 Communication Engineering (3)**

Prereq: 232, 312, and 341. (fall) Unified approach to communications stressing principles common to all transmission systems. Review of Fourier series, Fourier integral and complex frequency techniques with emphasis on communication networks, time response and convolution, measurement of information, amplitude modulation (double and single side-band techniques), frequency modulation, sampling theory, pulse modulation and digital communications systems, fundamentals of random signal theory and its application to communication systems, noise and its effect on conventional modulation systems; noise figure, noise suppression techniques, and other related topics.

**471 Statistical Analysis (3)**

Prereq: 470. (winter) Analysis of engineering problems using probabilistic and statistical concepts: probability, discrete and continuous random variables, distribution functions, means, moments, characteristic functions, statistical independence, stochastic processes, correlation, estimation, and applications to engineering problems.

**472 Random Signals in Linear Systems (3)**

Prereq: 471 or perm. (spring) Introduction to random electrical signals and noise. Autocorrelation, crosscorrelation, power spectra, Nth law detectors, matched filters, detection of signals in noise, optimum receivers, Bayes estimators.

**475 Digital Communication Systems (3)**

Prereq: 471 (spring) The design analysis of digital communication systems: signal modeling using random processes; sampling and reconstruction of signals; quantization (uniform and nonuniform). Channel noise is considered in the overall system design. Systems considered include: OOK; BPSK; FSK; DPSK; QPSK; MSK; and differential systems. Trade-off studies are performed in the design of the systems.

**478 Digital Processing of Signals (3)**

Prereq: 312 and 471. (on demand) Digital techniques for various signal-processing applications. Emphasis on design and realization of digital algorithms for performing specific filtering function. Topics include sampled-data signals, discrete-time system analysis, frequency response and realization of discrete-time systems, infinite impulse response digital filter design, finite impulse digital filter design, discrete and fast Fourier transforms.

**479 PCM Telemetry Systems (3)**

Prereq: 471 or perm. (on demand) In-depth study of pulse code modulation systems using total system error (sampling error, quantization error, and channel error). Uniform and nonuniform quantization, companding  $\mu$ -anquantization, companding  $\mu$ - and

A-law, optimum quantization, coding, DPCM (differential pulse code modulations), LDM (linear delta modulation), ADM (adaptive delta modulation). Comparison of systems and trade-off analysis.

**481 Internship in Electrical Engineering (1-3)**

Prereq: sr rank and perm. Supervised work-study program, in an electrical engineering profession, in established industrial environment. Credit dependent on advanced registration and mutual agreement between faculty supervisor and participating company. May be repeated; however, hrs applied for graduation limited by dept.

**490 Selected Topics (1-3)**

Prereq: perm. Selected topics of current interest in electrical engineering.

**495 Electrical Engineering Design (3)**

Prereq: 312, 322, jr comp., INCO 103. Students work individually, or in small groups, on open-ended design problems with 'real-world' constraints of economics, limited resources, and deadlines. Design problems may be of a software, device, or system nature; some may take the form of design competitions. Oral and written progress reports are required. Students have a major role in evaluating peer projects as to their feasibility, safety, reliability, aesthetics, and social impact.

## ENGINEERING, INDUSTRIAL AND SYSTEMS

**231 Introduction to Industrial and Systems Engineering (2)**

Prereq: MATH 263A. (fall) Overview of history and functions of industrial and systems engineering. Topics discussed include historical perspective, production engineering, plant location, plant layout, work measurement and design, job evaluation, production control, quality control, engineering economy, linear programming, and project management. 2 lec.

**248 Human Factors in Aviation (4)**

Application of human factors principles to the flight environment. Factors which affect pilot performance including aptitudes, perceptual limitations, fatigue, physical fitness, pilot error in terms of its measurement, classification, and control. Human dynamics of the cockpit will be discussed, including flight crew communication, leadership motivation, and use of automated speech recognition/synthesis. Design of the cockpit from a human factors point of view including displays and controls. Pilot training will be considered, with an emphasis on methods and techniques for developing design criteria for flight simulators.

**300 Principles of Industrial Engineering (3)**

Prereq: perm. (fall) Survey course covering traditional industrial engineering concepts and practices such as engineering economy, plant location, plant layout, work methods, work measurement, production control systems (including CPM and PERT), inventory control, and quality control. Not for ISE undergrad majors. 3 lec.

**304 Applied Engineering Statistics (3)**

Prereq: MATH 163B or MATH 263B or perm. (winter, spring) Introduction to efficient methods for data collection and analysis. Application of basic statistical tests, techniques, and experimental design concepts to engineering and science data problem areas. Not for ISE undergrad majors. 3 lec.

**305 Engineering Statistics I (3)**

Prereq: MATH 263C or perm. (fall, winter) Introduction to probability, concept of random variables, discrete and continuous probability distributions, and expectation.

**306 Engineering Statistics II (3)**

Prereq: 305 or perm. (winter, spring) Functions of random variables, sampling distributions, estimation theory, hypotheses testing, and statistical prediction.

**307 Engineering Statistics III (3)**

Prereq: 304 or 306 or equivalent, or perm. (fall, spring) Design and analysis of engineering experiments approached from linear statistical model point of view. Blocking designs, full and fractional factorial designs, analysis of variance, and introduction to response surface methodology. 3 lec.

**330 Engineering Economy (3)**

Comparing alternatives for acquisition of capital assets, expenditure of operating monies, and income generation. Topics include equivalence, annual cost method, present worth method, rate of return method, depreciation, benefit/cost, breakeven analysis, income taxes, equipment replacement, and risk. 3 lec.

**333 Work Design (5)**

Prereq: 304 or 305 or perm. (fall) Design of work systems and measurement of work. Topics include job methods, operation analysis, charting techniques and schematic models, stop-watch time study, work sampling, predetermined time systems, standard data, incentive wage systems, learning curves. 3 lec, 2 lab.

**336 Project Management (3)**

(fall, summer) Development and utilization of network techniques, such as PERT and CPM, to schedule activities, develop financial budgets, allocate resources, and control progress and costs of practical projects. Students introduced to use of available computer programs that generate project schedules. 3 lec.

**381 Internship in Industrial and Systems Engineering (1-3)**

Prereq: jr rank and perm. Supervised work-study program, in industrial and systems engineering profession, in established industrial or government environment. Credit dependent upon advanced registration and mutual agreement between faculty supervisor and participating company. Course may be repeated; however, hours applied for graduation limited by dept.

**402 Manufacturing Systems (4)**

Prereq: sr rank in ENT/perm. (fall) Applications of industrial and systems engineering techniques, principles, practices, and methodologies as they relate to the operation, analysis, management, planning, and design of manufacturing systems.

**403 Materials Handling Systems Engineering (4)**

Prereq: ISE 333 or perm. (fall) Provides the student with a broad understanding of materials handling engineering from a system design and application engineering point of view. Lecture course will instruct the student in the engineering principles, design criteria, operating parameters, performance requirements, equipment resources, and applications of engineering practices involved in the planning, design, and operation of materials handling systems for manufacturing, physical distribution, and government operations. A materials handling system design project is a required part of the course.

**408 Time Series Analysis in Systems Science and Engineering (4)**

Prereq: 307 and MATH 340. (spring) Data driven approach for determining the most appropriate mathematical model for describing the dynamic behavior of a system. Stochastic difference/differential equations for describing system dynamics. Flexibility of ARMA model for representing system dynamics. Sequential F-test for determining most appropriate ARMA representation. Green's function solution to ARMA models. Eigenstructure analysis of stability and invertability of ARMA models. Applications in prediction, control, and characterization problems.

**409 Cost Engineering (4)**

Prereq: 333, ISE 330, ACCT 201, or perm. Designed to instruct the student in product cost estimating, product value engineering, and manufacturing performance evaluation in state-of-the-art manufacturing systems. The course examines the application of industrial engineering techniques, work measurement, cost accounting, and computers to manufacturing cost measurement and process design.

**410 Decision Theory I (3)**

Prereq: 304 or 305 or perm. Introduction to decision theory, utility theory, and applications. Decision making under risk. Inventory, bidding, purchasing, maintenance, and investment applications. 3 lec.

**411 Decision Theory II (3)**

Prereq: 304 or 305 or perm. Bayesian decision theory and applications covering both profit and nonprofit institutions. 3 lec.

**415 Introduction to Systems Engineering (3)**

Prereq: 305, MATH 340, FORTRAN. (winter) Introduction to systems engineering concepts. Systems structure, open-loop and closed-loop systems, positive and negative feedback. Applications to production and inventory systems, population, and physical systems. Design project required. 3 lec.

**417 Analytical Foundations of Industrial and Systems Engineering (3)**

Prereq: 305, or perm. (fall) Special analytical techniques introduced for solution of complex industrial and systems engineering problems. Calculus of finite differences, Fourier analysis, and use of transform techniques in linear system analysis discussed. Probabilistic implications of transforms emphasized.

**422 Seminar on Occupational Safety and Health (3)**

Prereq: perm. (spring) Historical development of worker's compensation and industrial health and safety; review of federal activities in occupational health and safety with focus on contemporary public policy and risk/benefit issues. Specific occupational health and safety issues dealt with in seminar format.

**426 Microprocessor Applications (4)**

Prereq: FORTRAN, 305, or equiv. (fall, spring) Comparison and contrast of micro-, mini-, and mainframe computers; numbering and arithmetic systems; microprocessor and microcomputer hardware organizations; assembly and high-level languages; basic input/output and interfacing concepts; industrial data acquisition, process control and robotics concepts; graphics and industrial applications; data processing and file management for office use and business applications.

**427 Digital Computer Systems I (3)**

Prereq: COBOL or FORTRAN or perm. (fall) Overview of digital computer systems. Programming, storage organization, and search. Number representations, conversions, and elementary arithmetic operations. Addressing and instruction sequencing. Multi-programming, multiprocessing, and real-time systems.

**428 Digital Computer Systems II (3)**

Prereq: COBOL or FORTRAN or perm. (winter) Continuation of 427. See 427 for description.

**432 Inventory and Manufacturing Control I (3)**

Prereq: 305. (spring) Design of inventory and manufacturing control systems. Forecasting, continuous and periodic review inventory systems. Relationship between production schedules and inventory. Production scheduling systems; sequencing models; dispatching rules. 3 lec.

**433 Industrial Computer Applications (5)**

Prereq: 307, ET 240, MATH 340. (winter) Simulation of industrial problems utilizing digital computers. Stresses user-oriented programs. Applications include use of library routines and simulation languages such as CSMP and GPSS. Projects involving design of simulation programs required.

**434 Network Analysis (3)**

Prereq: 305. (fall) Engineering project planning using such techniques as PERT and critical path method, flow graphs, GERT, and other network models. 3 lec.

**435 Quality Control and Reliability (3)**

Prereq: 304 or 306 or perm. (fall, winter) Application of statistics to control of quality and reliability in products and services. Design of acceptance sampling and process control systems, including attention to inspection and test methods. Design and implementation of quality assurance programs, including nonstatistical dimension of quality systems. 3 lec.

**437 Modeling and Analysis of Computer Systems (5)**

Prereq: 306. Computer systems are characterized by hardware, software, and operating environment so such systems can be evaluated. Models of portion or function of batch, time sharing, or real-time computer systems developed and analyzed. Simulation, queuing, scheduling methods, and probability and statistics used as tools. Same course as CS 451. 5 lec.

**438 Modeling and Analysis of Computer Systems (5)**

Prereq: 437. Continuation of 437. See 437 for description. Same course as CS 452. 5 lec.

**439 Information Systems Engineering (3)**

Prereq: FORTRAN. Design of industrial information systems including data bases, displays, and the automatic storage, retrieval, and transmission of data.

**440A Industrial Plant Design I (3)**

Prereq: 333, 445A, perm. Introduction to 2-qr program in which students will learn to design a manufacturing facility. First qr, topics include product and process analysis, plant size, layout and location, and building design, estimation of production time for each operation, production scheduling, and inventory control.

**440B Industrial Plant Design II (3)**

Prereq: 440A. (spring) Continuation of 440A with team design of a factory and emphasis on selection of process equipment, incentive wage system, quality control system, project management, and layout of facility using both computer and conventional techniques.

**441 Introduction to Operations Research (3)**

Prereq: 305 or perm. (winter) Basic methodology of operations research. Applications and mathematical structure of linear models, linear, integer, and dynamic programming, queueing theory, and other modeling techniques. 3 lec.

**442 Inventory and Manufacturing Control II (3)**

Prereq: 305 or perm. (winter) Branch and bound scheduling algorithms, horizon planning, control of integrated production, inventory and workforce systems, linear decision rules. 3 lec.

**443 Work Design in a Technological Society (3)**

Prereq: perm. Exploration of interaction between industrial and systems engineering and labor as institution. Arbitration, technological change, and work organization. 3 lec.

**444 Applications of Mathematical Programming (3)**

Prereq: MATH 211 or perm. (spring, summer) Linear programming theory and practice. Topics include simplex method, 2-phase method, duality theory, and sensitivity analysis. 3 lec.

**445A Systems Design I (3)**

Prereq: 333, 435, 411, 448, with 432. (fall) Design methodology and principles. Identification and definition of design project.

**445B Systems Design II (3)**

Prereq: 445A. (spring) Individual or small-group system design project continued from 445A.

**446 Design and Analysis of Maintenance Systems (3)**

Prereq: 333, perm. (fall) Intended to provide industrial engineering students with working knowledge of maintenance systems and ability to design maintenance system. Will stress application of analytical and quantitative industrial engineering techniques to maintenance management. Major emphasis on design of maintenance systems. Guest lectures, field trips, and term project which requires students to design maintenance system for manufacturing company, using quantitative industrial engineering techniques, are integral parts of course.

**447 Work Physiology and Occupational Biomechanics (4)**

Prereq: 448. Introduction to the theory and methodologies involved in work physiology and occupational biomechanics. Structural and functional design of the human body to determine its implications for the design of physical work, tools, and the workplace itself. Applications to classification of work, manual materials handling, tool design, workplace design, and worker selection and training. Selected environmental conditions which alter performance (e.g., vibration, altitude, pressure variations) will be discussed.

**448 Human-Machine Systems (3)**

Prereq: with 307, ET 240, ENG 305 J. (spring) Role of operator as subsystem in human-machine systems. Design principles for information displays, equipment controls, workplace environments, and life support systems. Design project required. 3 lec.

**449 Cognitive Engineering (4)**

Prereq: ISE 448. Addresses the human capabilities/limitations in information processing, learning, perception and attention, and applications of this knowledge to the analysis and design of human-machine interfaces in the work environment.

**489 Special Investigations (1-6)**

Prereq: perm.

**490 Advanced Problems in Computer Applications (1-6)**

Prereq: perm. Special investigations of advanced industrial and systems engineering problems involving use of digital or analog computers.

**301 Kinematics and Dynamics of Machines (4)**

Prereq: grade of C or better in 224. (winter) Analytical and graphical solutions of motion problems involving mechanical elements: linkages, gears, cams and mechanical trains, etc.

**313 Metal Processing (3)**

Prereq: CE 222, CHE 331. (winter) Structure of metals, mechanics of metal forming and metal cutting. Analysis of forces, energy requirements, and temperature effects. Interrelationship between metal processing and mechanical properties.

**321 Introduction to Thermodynamics (4)**

Prereq: PHYS 253, MATH 263C. Basic engineering thermodynamics. Definitions, first law, properties and property relations, second law, availability, applications to engineering problems.

**328 Applied Thermodynamics (4)**

Prereq: grade of C or better in 321. (spring) Nonreactive and reactive mixtures, turbomachinery, analytical studies of gas and vapor power cycles, and refrigeration. 4 lec.

**350 Introduction to CAD (2)**

Prereq: jr/sr rank or perm. (fall, spring) Emphasis is upon the usage of the O.U. Computer Aided Design/Computer Aided Manufacturing System with the following topics covered: menu basis, training files, Interactive Graphics design system, Mechanical Design system, EDG-graphics editor, EDT-VAX/VMS editor and VI Unix editor, VAX/VMS based DCL commands, Introduction to Unix and "C", Intergraph Finite element pre-post processors, and other topics as needed.

**398 Junior Laboratory (3)**

Prereq: 224. Introduction to measurement of various phenomena frequently encountered in mechanical engineering, e.g., strain, temperature, pressure, flow rate, displacement, acceleration. Emphasis given to interpretation of data and preparation of laboratory reports.

**400 Heating, Ventilation, and Air Conditioning (3)**

Prereq: jr rank. Description and evaluation of heating; air conditioning and total-energy systems employed to provide thermal environments for buildings ranging in scope from residences to integrated commercial, apartment, or industrial complexes. Covers human comfort, psychrometrics, load analysis, techniques, equipment, and controls.

**401 System Analysis and Control (4)**

Prereq: MATH 340. (spring) Modeling and formulations of physical systems. Transient and steady-state dynamic responses, and other fundamental theory of automatic controls and applications. 3 lec, 1 lab.

**403 Machine Design I (4)**

Prereq: CHE 331, grade of C or better in CE 222. (fall) Applications of mechanics, mechanisms, materials, and mechanical processes to design and selection of machine members and units of power transmission.

**404 Machine Design II (4)**

Prereq: 403. (winter) Morphology of engineering design. Applications of statistics and probability and techniques of optimization to design. Team design project.

**406 Analysis and Design of Mechanisms (4)**

Prereq: 301. Analysis and synthesis of planar and 3-dimensional mechanisms using classical and modern analytical approaches. Structural synthesis of mechanisms, dimensional synthesis of linkages for function generation, path generation, and for rigid-body guidance. Applications of matrix methods, optimization techniques, and computer solutions.

**407 Fundamentals of Nuclear Engineering (4)**

Prereq: perm. Nuclear engineering, including nuclear reactions, radiation detection and measurement, reactor criticality, principles of reactor control, radiation shielding, effects of radiation on materials, uses of radioactive materials.

**408 Nonlinear Vibrations (3)**

Prereq: perm. Qualitative and numerical study of mathematics and physics of nonlinear systems. Formulations of nonlinear engineering problems, solutions techniques, and stability analysis.

**409 Advanced Engineering Dynamics (3)**

Prereq: 224. Theoretical analysis and applications of dynamical aspects and problems of machines and systems.

**412 Heat Transfer (4)**

Prereq: MATH 340, ET 240, grade of C or better in ME 321 and CE 340. (spring) Basic concepts of conduction in 1 or more dimensions.

**ENGINEERING, MECHANICAL****224 Dynamics (4)**

Prereq: PHYS 251, grade of C or better in CE 220 or perm. (fall, winter, spring) Motion of particles and rigid bodies, work and energy, impulse and momentum. 4 lec.

steady and transient modes. Radiation, fundamentals of convection in various modes, heat exchanger design. 4 lec.

#### 413 Conduction and Radiation Heat Transfer (4)

Prereq: perm. Advanced analytical treatment of conduction and radiation heat transfer. Boundary value problems, orthogonal expansions, moving heat sources, multi-dimensional problems with time varying boundary conditions, finite difference analysis, conformal transformations, radiation network matrix analysis, diffuse-specular exchange, and Monte Carlo techniques, etc.

#### 416 Combustion (3)

Prereq: 328, 412, or perm. Introduces student to fundamentals of combustion; enables students to analyze complex combustion processes in constructive manner. Modern diagnostic techniques of combustion, and evaluation of pollution potential of different combustion processes.

#### 417 Design of Thermal Systems (4)

Prereq: 328, 412, (fall) Design of systems in which thermodynamics, transport behavior, and optimization techniques are major considerations. Emphasis on total design approach including factors such as cost and reliability. Typical systems include power, propulsion, environmental, and cryogenic. Design project and report required.

#### 418 Mechanical Engineering Experimentation (1)

Prereq: ME sr or grad rank. Instruction in experimental procedure and experience in designing and executing lab experiments. Students plan and execute their own experiments to acquire answers to assigned problems. Variety of areas covered including control systems, energy conversion, fluid flow, heat transfer, motion measurements, stress-strain. Instructional guidance provided by entire mechanical engineering staff. Provides familiarity with variety of instrumentation and procedures. 3-qr sequence with experimental subjects phased with prerequisites.

#### 419 Mechanical Engineering Experimentation (1)

Prereq: ME sr or grad rank. Continuation of 418. See 418 for description.

#### 420 Mechanical Engineering Experimentation (1)

Prereq: ME sr or grad rank. Continuation of 419. See 418 for description.

#### 422 Stirling Cycle Machine Analysis (3)

Prereq: ET 240, ME 328, CE 340, with ME 412. Analysis and simulation of Stirling cycle machines, in which the single phase working gas operates in a closed thermal power cycle. Development and use of computer simulation techniques to model the nonsteady flow conditions including thermodynamics, heat transfer, and fluid flow friction effects.

#### 424 Gas Dynamics I (3)

Prereq: CE 340 or perm. 1- and 2-dimensional compressible flow-isentropic flow, flow with heat transfer, friction, shocks, generalized 1-dimensional flow. Applications to propulsion systems. 3 lec.

#### 425 Propulsion Systems Analysis (4)

Prereq: 424. Applications of basic engineering disciplines to design and analysis of vehicle propulsion systems. Extensive use of digital computers. Term report required.

#### 427 Power Station Engineering (3)

Prereq: 328 and 412. Fuels, principles of combustion, stationary boilers, grates, stokers, furnaces, coal pulverizers, economizers, preheaters, superheaters, stacks, forced and induced draft, boiler-feed pumps, heat balances, and hydro power. 3 lec.

#### 433 Numerical Heat Transfer and Fluid Flow (3)

Prereq: 412, CE 340, or perm. Numerical solution techniques in heat and mass transfer, fluid flow, and related processes. Includes governing conservation equations, discretization methods, heat conduction, convection, diffusion, and calculation of flow field.

#### 434 Fundamentals of Aerosol Behavior (4)

Prereq: 321, 412, or perm. Aerosol characterization transport properties, convective and inertial deposition, light scattering and visibility, experimental methods, coagulation, gas to particle conversion, general dynamic equation for aerosols.

#### 435 Energy Engineering and Management (3)

Prereq: perm. Basic concepts and objectives of energy management, energy audit, engineering evaluation of several energy systems, availability analysis, second law efficiency, economic evaluation, and application of these principles to case studies.

#### 440 Direct Energy Conversion (4)

Prereq: perm. (on demand) General principles of unconventional energy conversion. Thermoelectricity, thermionics, MHD, fuel cells, photovoltaics, wind systems, solar systems, and energy storage.

#### 446 Potential Flow Theory (3)

Prereq: perm. Inviscid flow theory. General equations of fluid dynamics, study of potential flow. Grad-level course open to selected undergrads.

#### 447 Viscous Flow Theory (3)

Prereq: perm. (winter) Mechanics of fluid resistance, laminar and turbulent flow. Applications to external boundary layer flow and to flow in ducts. Grad-level course open to selected undergrads. 3 lec.

#### 450 Computer-Aided Design (3)

Prereq: 403, 412, 491, or perm. (winter) Applications of contemporary computer modeling techniques to solve complex problems in stress, heat transfer, dynamic systems, and fluid flow. Emphasis given to applications of these techniques to solve specific problems in mechanical engineering design.

#### 455 Robotics (3)

Prereq: 224, EE 314, ET 240, or perm. (winter) Principles of design of computer-based, intelligent machines. Microprocessor/microcomputer fundamentals, input-output sensors and actuators, computer achievement of machine kinematics, robot-control techniques, lab experience in microprocessor-machine interfacing.

#### 456 Robotics II (3)

Prereq: 403, 401, 455 or equiv. EE 314, perm. (spring) Continuation of 455. Design of intelligent machines with emphasis on design for assembly and design for adaptive tasks. Actuator characteristics and control; kinematics, dynamics, and path control of connected links; special requirements of advanced robotics tasks; optical, acoustical, and tactile sensing and control; end effector and workstation fixtures design.

#### 460 Computer Integrated Manufacturing/Processes (4)

Prereq: 450 or perm. Introduction to numerical control; control systems for NC; communication media; NC programming languages — SPPL and APT; mathematics for NC; parametric splines, Bezier Curves and B Splines; sculptured surfaces including Coons bi-cubic patch and B-surf.

#### 462 Manufacturing Processes (4)

Prereq: Graduate standing in ENT/permission. The basic theory of plasticity and its application to manufacturing processes. Applied theories of metal working processes such as forging, extrusion, rolling and some aspects of machining; theories of polymer processing, composite and reinforced materials processing use of application of materials information systems (MIS) and mapping techniques.

#### 475 Solar Design (3)

Prereq: jr/sr rank, MATH 263C, PHYS 253, or equiv. Introduction to theoretical principles and practical design aspects of solar energy systems. Topics covered include principles of radiation; heating load computation; air and liquid, flat-plate collectors; concentrating collectors; energy storage; photovoltaic conversion; economic analysis.

#### 480 Colloquium (0)

Prereq: sr rank. Open presentation of individual engineering analysis or design effort. Requires demonstration of individual analytical or design ability and satisfactory oral presentation techniques.

#### 484 Projects in Thermal Machinery (3)

Prereq: perm, good academic record. Research in thermal machines. Individual work on experimental or analytical project involving current problems. Training in use of library, theory and use of instruments, error analysis, planning of experiments, effective report writing. Students should elect 2-term sequence to allow adequate time for completion of meaningful project. Report required.

#### 485 Projects in Thermal Machinery (3)

Prereq: perm, good academic record. Continuation of 484. See 484 for description.

#### 486 Projects in Thermal Machinery (3)

Prereq: perm, good academic record. Continuation of 484-485. See 484 for description.

#### 489 Special Investigations (1-6)

Prereq: perm.



**491 Mechanical Vibrations I (3)**

Prereq: grade of C or better in 224, MATH 340, ET 240, srs, grad. (fall) Characteristic phenomena of mechanical vibrations encountered in machines and structures (of 1 degree of freedom) and their quantitative investigation. Simple harmonic motion; free, transient, and forced vibrations; and damping effects.

**492 Mechanical Vibrations II (4)**

Prereq: grade of C or better in 491, perm. (spring) Application of matrix methods; 2 degrees of freedom systems; lumped mass systems with several degrees of freedom, and methods for normal mode determination. 4 lec.

**493 Lubrication and Bearing Analysis (3)**

Prereq: perm. Concepts of boundary, hydrostatic, and hydrodynamic lubrication. McKee, and Boyd and Raimondi methods. Solid lubrication, porous bearings, gas bearings.

**494 Advanced Machine Design (3)**

Prereq: perm. Advanced considerations in design and analysis of machine members, strength under combined stress, thermal stress, fatigue in metals, design using plastics. 3 lec.

**495 Introduction to Kinetic Theory and Statistical Thermodynamics (4)**

Prereq: perm. Kinetic theory, classical and quantum statistical mechanics with applications to engineering devices. 3 lec.

**496 Experimental Methods in Design (3)**

Prereq: 403, perm. Investigation and evaluation of experimental methods that may be used to obtain design and performance data. Techniques of photoelasticity, strain measurements, and vibration measurement.

**497 Methods of Engineering Analysis I (4)**

Prereq: MATH 340 or perm. (fall) Applications of matrices, Fourier series, partial differential equations, and Bessel functions.

**498 Senior Laboratory (3)**

Prereq: 398, 412, 403 or concurrent. Mechanical engineering experiments. Measurement of the behavior of more complex systems encountered in mechanical engineering. Equal emphasis given to mechanical systems and to thermal and fluid systems. Engines, vibrating systems, wind-tunnel experiments, refrigeration systems, fatigue, multi-dimensional stresses, and combustion are typical subjects for investigation.

**499 Senior Design Project (4)**

Prereq: 404 or 417, and perm. Capstone design project in mechanical engineering. Self directed or group project which requires typical design activities such as decision making, feasibility evaluation, technical analysis, performance summary, technical report preparation, and oral technical presentation. Projects may be individually arranged with a faculty member in mechanical engineering or a group project (current examples are the Mini Baja Vehicle Contest or the Walking Robot Contest). Subject matter can be mechanisms, thermal/fluid systems, control systems, etc. Oral final presentation to senior class and panel of faculty required.

## ENGINEERING AND TECHNOLOGY

**100 Engineering and Technology (3)**

(summer) Introductory course to engineering and technology for students, in the Summer Pre-Engineering Program. Lectures in related fields and involvement in engineering problems through student-selected projects.

**134 Electronic Maintenance (3)**

Information on how to maintain and repair all types of electronic equipment (e.g., computers, solid state equipment, and stereophonic equipment). No previous experience in electronics necessary. Demonstrations and lab experience will provide each student with theory and practical basic instructions on how to use test equipment. 1 hr lec, 4 hrs lab.

**181 Computer Methods in Engineering I (4)**

Prereq: Calc. placement or MATH 113 or 263A, preference given to ET or pre-engineering majors. Introduction to application of digital computation for solution of engineering problems, with emphasis on methodology and organization. Problem formulation and pro-

gramming using structured language in a microcomputer-based interactive environment. Emphasis on logical program development and strategy, data input/output and processing, arrays, procedures, and functions and their role in solving engineering problems through modular program design. No credit given to students with credit for CS 230.

**190 Cooperative Education Field Experience I (1)**

Prereq: perm. Required of, and limited to, students on approved co-op work assignments. Prior approval required before a student registers. Credit earned is not applicable toward specific degree requirements, but will accumulate in the student's academic credit total. In addition to continual monitoring of student's progress by the cooperative education coordinator and the faculty advisor, participating students are required to submit a final report of their activities.

**240 Computer Methods in Engineering II (4)**

Prereq: ET 181 and MATH 263C or with 263C or perm. Introduction to application of digital computation techniques to engineering problems including applied numerical methods. Study and use of FORTRAN language as analytical tool. Utilization of common computer peripheral equipment.

**280 Engineering and Technology-Overview (4) (2A)**

Intended for students of all majors and non-Engineering Technology students are encouraged. Provides an overview of engineering and technology, to place the profession in a historical context, to examine the views of supporters and detractors, to examine moral and ethical issues associated with the profession in society, and to develop an appreciation for the manner in which engineering and technological work is conducted. Emphasizes a "problem-solving" approach to questions of all kinds, but more specifically technological.

**290 Cooperative Education Field Experience II (1)**

Prereq: perm. See ET 190.

**320 History of Western Technology (3) (2A)**

Survey of significant technological innovations of Western civilization from Greco-Roman period into 20th century. Interrelationships, in history, between technology and society. Background in technology or science not required.

**322 Introduction to Materials Behavior (3)**

Introductory materials science course covering behavior of metals, polymers, and ceramics for nontechnical majors.

**325 Pollution Solutions I (3)**

Understanding current air pollution problems, their causes, effects, and possible solutions and impact of those solutions on society.

**326 Pollution Solutions II (3)**

Same course description as 325 covering different aspects and topics. Not a continuation of 325.

**331 Fluid Dynamics for Nonengineers (3)**

Prereq: jr rank or perm. Not open to engineering students. Physical, not mathematical, introduction to principles controlling fluid motions in our environment. Study of weather, blood circulation, aerodynamics, river hydraulics, and rocketry through design of golf balls and plumbing systems included. Introduction to mechanics, fluid properties, fluids at rest and in motion. Lectures and reading assignments supplemented with films.

**334 Water Pollution Control (3)**

Prereq: soph rank, non-engineering students. Designed for student with limited technical background but who is interested in problems of water pollution. Deals with nature of water, source and character of pollutants, technology of waste-water renovation, ecology of water pollution and legal, economic, and administrative constraints.

**337 Transportation Today (3)**

Prereq: jr rank or perm. not open to civil engineering majors. Designed for student with limited technical background who is interested in gaining knowledge in area of highway and transportation planning and design. Major topics include geometric factors, traffic studies, modes of transportation, human equation, and planning strategies.

**345 Fundamentals of Analog Computation (3)**

Prereq: MATH 340. Basic operation of analog computer and auxiliary equipment. Solution of linear and nonlinear differential equations and simulation of physical systems on analog computer.



**350 Engineering and the Technological Society (3) (2A)**

Prereq: jr or sr rank. Technical inventions and social inventions, impact and social consequences of engineering, public policy issues, ethical considerations, and some exploration of alternative futures. Discussion and lecture format used.

**360 Communication Technology (3)**

Introduction to theory and application of electronic devices and systems employed in communications. Topics include among others man-to-computer communication, CRT terminals, radio and television receivers and transmitters, communication satellites, information transmission by light waves. Not open for credit to engineering majors.

**390 Cooperative Education Field Experience III (1)**

Prereq: perm. See ET 190.

**400 Professional Engineering Fundamentals Review (2)**

Prereq: sr. rank. Review of basic engineering principles. Provides a compact review of basic engineering principles and illustrated by practical solutions.

**445 Advanced Numerical Methods (4)**

Prereq: ME 497 or equiv. (winter) Numerical methods for solution of ordinary and partial differential equations, stability considerations and error estimates, application to variety of engineering problems, numerical method of lines and integration procedures for stiff ODE systems.

**470 Energy and the Environment (3) (2A)**

(on demand) Technical, economic, political, and environmental factors in energy production. Conventional, gasification, synfuels, fission, fusion, solar, wind, and possible future conversion techniques. Course designed to provide understanding needed for intelligent participation in societal decisions related to energy issues. (Equivalent to MATH 445)

**490 Cooperative Education Field Experience IV (1)**

Prereq: perm. See ET 190.

## ENGLISH

The major requirement for the A.B. degree consists of at least the following 42 hours above 199: (A) 200, (B) 312, 313, and 314, (C) 301 or 302 or 303, (D) 307 or 351 or 352, (E) 321 or 322, (F) 360 or 361 or 362, and (G) 460. Completion of these courses automatically completes the College of Arts and Sciences requirement of nine hours in the major at the junior-senior level.

An intensive, two-year major program by tutorial instruction is offered by the Department of English, beginning each fall term. Information is available from the chair.

Students who wish to major in creative writing will take 16 hours of creative writing, 12 of which will be in addition to the requirements for an English major, and four of which will be 453A or B instead of 460.

Honors work in English: see Departmental Honors under Honors Tutorial College. For general English requirements, see the College of Arts and Sciences section of this catalog.

English minor: The English minor consists of a minimum of 24 hours above 199 including a minimum of two courses above 299 and excluding the course used to fulfill the junior composition requirement. Students are encouraged to plan their minor with a faculty advisor in the Department of English.

## English Language and Literature

**150 Developmental Writing Skills (4)**

Prereq: placement or recommendation (but note that credit for 150 will not be given any student who has passed any higher-level English course). Only students with severe writing disabilities should enroll in 150; students who are merely weak or anxious about their preparation should enroll in 151 and seek concurrent tutoring from the Academic Advancement Center. Does not satisfy Arts and Sciences humanities requirement. (Nonnative speakers should take 150A.)

**151 Freshman Composition:****Writing and Rhetoric (5)****(1E)**

Prereq: 150 or (quarter) 151 placement. Focuses on writing expository essays which are well organized and logically coherent. Students write approximately 10 essays (5,500 words). Essay topics come from personal experience or from reading nonfiction. Not a grammar course; those who require services of tutor in correcting sentence errors should consult Academic Advancement Center. (Nonnative speakers should take 151A.)

**152 Freshman Composition:****Writing and Reading (5)****(1E)**

Prereq: fr and soph only. Focuses on writing expository essays which are well organized and logically coherent. As preparation for 4-5 papers required, students will read fiction, poetry, and drama focused on common themes and discuss their understanding of issues and works presented.

**153 Freshman Composition: Special Topics (5)****(1E)**

Prereq: fr and soph only. Similar in structure and purpose to 152 but each section—topic and texts—designed by person who teaches it. Specific course description with text lists advertised quarterly in Ellis Hall.

**153A Freshman Composition: Special Topics****Women and Men in Literature (5)****(1E)**

Prereq: fr and soph only. Readings used to examine depiction of women and men in literature. Students encouraged to think and write about how, in both literature and life, women and men see themselves and each other, how people learn what society expects of them, and about such topics as sexuality, marriage, friendship, and rebellion against sex roles.

**153B Freshman Composition: Special Topics****Afro-American Experiences in Literature (5)****(1E)**

Prereq: fr and soph only. Readings examine various experiences of black person in America, from earliest writings up to — and emphasizing — most contemporary literature. Including fiction, poems, essays and autobiography, course deals with oppression, violence, and tragedy as well as humor, joy, and love.

**200 Introduction to Literature (4)****(2H)**

Prereq: one course above 150. Approaches to reading and interpretation of literature, emphasizing skills, techniques, and language of interpretation.

**201 Interpretation of Fiction (4)****(2H)**

Prereq: one course above 150. Forms and techniques of art of fiction.

**202 Interpretation of Poetry (4)****(2H)**

Prereq: one course above 150. Intensive reading of selected poems from all periods of English and American literature and study of forms and techniques.

**203 Interpretation of Drama (4)****(2H)**

Prereq: one course above 150. Analysis of number of plays written at various times and in various dramatic forms.

**204 Introduction to International Literature I:****The Classical Tradition (5)****(2H)**

Prereq: one course above 199. Selected classical texts, sometimes alone and sometimes in conjunction with modern texts, for purpose of defining classical sensibility in Western literature.

**205 Introduction to International Literature II:****Romantic Tradition (5)****(2H)**

Prereq: one course above 199. Will deal with aesthetic and philosophical concepts that have formed Romantic Tradition in Western literature. Concentration on works by German, English, and French writers.

**206 Introduction to International Literature III:****The Modern Tradition (5)****(2H)**

Prereq: one course above 199. Selected literary works which provide background for and express modern sensibility in Western literature.

**210 Critical Approaches to Popular Literature (4)**

Prereq: one course above 150. Introduction to techniques of literature and literary criticism using books from that area where serious literature and popular literature meet.

**270 Special Studies: Individual or Comparative Authors (2-3)**

Prereq: one course above 150. Intensive study of individual or comparative authors: (A) Medieval, (B) Renaissance, (C) Restoration and 18th century, (D) 19th-century American, (E) 19th-century British, (F) 20th-century American, (G) 20th-century British, (H) Continental.

**271 Special Studies: Selected Themes or Topics in Literature (2-3)**

Prereq: one course above 150. Intensive study of selected theme or topic: (A) poetry, (B) fiction, (C) drama, (D) comparative genres, (E) language, (F) stylistics and rhetoric, (G) literature and film, (H) criticism.

**280 Expository Writing and the Research Paper (4)**

Prereq: one course above 150. Intermediate-level writing course offering practice in library research, techniques of documentation, and writing research paper.

**301 Shakespeare: The Histories (5)**

Prereq: one course above 199. History plays.

**301A Shakespeare: Selected Plays and Poems (3)**

Prereq: one course above 199. Selected tragedies, histories, and comedies with related poems. Examination of themes, characters, and language. Not for English majors. Not duplicated by 301.

**302 Shakespeare: The Comedies (5)**

Prereq: one course above 199. Comedies.

**302A Shakespeare: Selected Plays and Poems (3)**

Prereq: one course above 199. Continuation of 301A. See 301A for description. Not duplicated by 302.

**303 Shakespeare: The Tragedies (5)**

Prereq: one course above 199. Principal tragedies.

**303A Shakespeare: Selected Plays and Poems (3)**

Prereq: one course above 199. Continuation of 301A and 302A. See 301A for description. Not duplicated by 303.

**304 English Bible (5)**

Prereq: one course above 150. Selected prose and poetry of Old and New Testaments.

**305J Technical Writing (4) (1J)**

Prereq: jr rank and completion of first-year composition. Focuses on writing of clear and concise proposals, feasibility reports, progress reports, and descriptions of mechanisms and technical processes.

**306A Studies in Oriental Literature (5) (2T)**

(fall) Introduction to cultural background of Oriental literature.

**306B Studies in Oriental Literature (5) (2T)**

Prereq: 306A. (winter) Continuation of 306A. Study of classical Oriental literature.

**306C Studies in Oriental Literature (5) (2T)**

Prereq: 306B. (spring) Continuation of 306A-B. Study of modern Oriental literature.

**307 The Structure of American English (5)**

Prereq: two courses above 199. Study of grammar of English using linguistic model chosen from contemporary linguistic theories. Course inevitably has dual focus: on facts of English usage and on theories linguists have created to organize and explain them. Instructor may wish to present complete grammar (phonology, morphology, syntax) or portion of one (e.g., syntax), or compare several grammars. Phonetics may be taught.

**308J Advanced Composition (4) (1J)**

Prereq: jr rank and completion of first-year composition. Aim: to increase skills and expertise in writing of discursive prose. Method: regular practice and evaluation, supplemented by attention to professional prose and concepts in rhetoric and style.

**309A Creative Writing: Poetry (4)**

Prereq: 200 or 202 or perm. Beginning course in creative writing. Will concentrate on processes of invention as they lead to works of poetry. Student manuscripts criticized; creative literary works of recognized importance analyzed; act of writing continuing practice.

**309B Creative Writing: Fiction (4)**

Prereq: 200 or 201 or perm. Beginning course in creative writing. Will concentrate on processes of invention as they lead to works of fiction. Student manuscripts criticized; creative literary works of recognized importance analyzed; act of writing continuing practice.

**310 McGuffey Lectureship in Literature (1-5)**

Prereq: one course above 150. Special series of lectures offered by current McGuffey Visiting Professor of English. Subject announced each qtr. Number of lectures offered determines credit hrs assigned.

**312 Medieval and Renaissance English Literature (5)**

Prereq: two courses above 199. Major works, writers, genres, and social norms of Medieval and Renaissance periods.

**313 Restoration and Neoclassical English Literature (5)**

Prereq: two courses above 199. Major works, writers, and genres of Restoration and Neoclassical periods.

**314 Romantic and Victorian Literature (5)**

Prereq: two courses above 199. Major works, writers, and genres of 19th century.

**315 American Literature (3)**

Prereq: one course above 150. American authors, themes, genres, etc., usually in 19th- and 20th-century literature.

**316 English and Continental Literature (3)**

Prereq: one course above 150. Authors, themes, genres, etc. in English and European literature.

**317A American Literature by Black Authors (5)**

Prereq: one course above 150. Examines literature being written by black authors in America and attempts to assess quality and significance of this cultural contribution. (A) Emphasizes background materials, fiction, and autobiography of 19th and 20th centuries; (B) emphasizes poetry, but includes further reading in recent fiction and nonfiction prose; (C) emphasizes drama, continues study of new trends in poetry.

**317B American Literature by Black Authors (5)**

Prereq: one course above 150. Continuation of 317A. See 317A for description.

**317C American Literature by Black Authors (5)**

Prereq: one course above 150. Continuation of 317A, B. See 317A for description.

**318 Women and Literature (4)**

Prereq: one course above 199 and jr rank, or perm. Survey of work of significant woman writers of past and present.

**319J Women and Writing (4) (1J)**

Prereq: jr rank and completion of first-year composition. A junior-level composition course focusing on women and writing. It satisfies the upper level undergraduate writing requirement and at the same time provides students with the opportunity to concentrate on issues of gender.

**321 American Literature to the Civil War (5)**

Prereq: two courses above 199. Major works, writers, and genres of American literature before Civil War.

**322 American Literature Since the Civil War (5)**

Prereq: two courses above 199. Major works, writers, and genres of American literature since Civil War.

**331 20th Century British and American Literature (5)**

Prereq: two courses above 199. Some major works, writers, and genres of British and American literature in this century.

**335 The Ohio University Writers (4)**

Features personal visits to classroom by writers teaching at Ohio University to discuss their works with students, to answer questions from class, and to read from new work or work in progress.

**345 Readings in Children's Literature (4)**

Prereq: one course above 199. Readings in classic and contemporary children's literature, together with consideration of historical development of children's literature, philosophical and aesthetic bases, criteria of great children's literature.

**350 Traditional Grammar, Mechanics, and Usage (3)**

Prereq: one course above 150. Concentrates upon grammatical understanding and awareness of relationships in sentence structure, including understanding of incidental usage and punctuation.

**351 The History of the English Language (5)**

Prereq: two courses above 199. Course examines various kinds of changes to which English is subject: in sound patterns and in

grammatical forms, in vocabulary and its semantic values. Shows origin and fate of various literary and social norms of various periods of language, and gives some attention to dialects.

**352 The Development of American English (5)**

Prereq: two courses above 199. History of English language in America; topics covered are comparison of British and American English, phonetic transcription, sources of American English in 17th-century British dialects, development of major regional dialects on east coast and their movement westward, archaic speech of Appalachia and other relic areas, black English, Noah Webster's spelling book and dictionaries, background of controversy over correctness in America.

**360 Major English Authors (4)**

Prereq: jr or sr rank or perm. Studies 1 or 2 British authors with view to providing extensive knowledge of writer's or writers' aesthetic tactics, themes, and career developments. Writers to be studied named in subtitle.

**361 Major American Authors (4)**

Prereq: jr or sr rank or perm. Same as 360; pertains to American authors.

**362 Major International Authors (4)**

Prereq: jr or sr rank or perm. See 360 for description; pertains to non-English speaking writers.

**385 History of Books and Printing (4)**

Prereq: one course above 150. (fall) Introduction to history of the book and its place in development of Western culture from ancient world to present. Approach is primarily historical, cultural, and aesthetic rather than technical.

**393 Creative Writing Workshop: Short Story (4)**

Prereq: 309B and perm. Instruction and practice in writing of fiction, concentrating on development of narrative techniques, character building in stories, staging scenes in narrative, etc.

**394 Creative Writing Workshop: Nonfiction (4)**

Prereq: 309B and perm. Will concentrate on writing nonfiction, and will explore general techniques of prose as they apply to fictionalized biography and literary essay and as used to dramatize effectively works that are generally considered nonfiction.

**395 Creative Writing Workshop: Poetry (4)**

Prereq: 309A and perm. Experience and language of poetry, and emphasis upon practice of writing poetry.

**450A Teaching Language and Composition (3)**

Prereq: sr rank. Content and methods of presentation for teaching language and composition in high school. Not applicable to Arts and Sciences 200-level requirement.

**450B Teaching Literature (3)**

Prereq: sr rank. Content and methods of presentation for teaching literature in high school. Not applicable to Arts and Sciences 200-level requirement.

**451 Studies in Criticism (5)**

Prereq: sr rank. Some aspects of history and of problems in critical theory and its application.

**453A or B Form and Theory of Literary Genres (4)**

Prereq: 8 hrs of creative writing. Intensive study of serious poetry (A) or fiction (B) with emphasis on problems writer faces in literary composition.

**455 English Education Workshop (1-5)**

Prereq: teaching certificate or equiv or perm of instructor. Studies in principles, problems, approaches, and issues in teaching of English from elementary school to post-secondary. Topics determined according to need and demand.

**457 Readings in English Education (5)**

Prereq: jr rank. Recent developments and writings in English education and their possible application to teaching of jr and sr high school English.

**460 Literary Genres (4)**

Prereq: jr or sr rank or perm. Intensive study of selected literary genre in selected period. Genre and period indicated in subtitle.

**461 Colloquium (5)**

Prereq: sr rank. (fall) Specific interdisciplinary problems to be assigned each qtr.

**462 Colloquium (5)**

Prereq: sr rank. (winter)

**463 Colloquium (5)**

Prereq: sr rank. (spring)

**470 Special Studies (5)**

Prereq: sr rank. Selected literary topics and studies.

**490 Independent Reading (1-15)**

Prereq: perm. Directed individual reading and research.

**496A or B Advanced Workshop in Poetry or Fiction (4)**

Prereq: 393 or 395 & perm of instr. in advance. Will consist largely of independent work in particular literary genre. Students meet together or individually with instructor, according to needs of particular work of that qtr.

**499H Honors Project (5-15)**

Prereq: perm. Completion of individual writing project for A.B. with honors in English.

## Humanities

**107 Humanities — Great Books (4) (2H)**

Prereq: fr and soph only. (fall) Ancient classics of Western civilization (Greek, Roman, Biblical) leading toward understanding of cultural heritage. Guidance in critical thinking, reading, and writing about those works.

**108 Humanities — Great Books (4) (2H)**

Prereq: fr and soph only. (winter) Medieval and Renaissance classics of Western civilization. See 107 for further description.

**109 Humanities — Great Books (4) (2H)**

Prereq: fr and soph only. (spring) Modern classics of Western civilization (18th-20th centuries). See 107 for further description.

**117 Humanities — Great Books of the Orient (4) (2H)**

Prereq: fr and soph only. Masterpieces (both ancient and modern) of India, China, and Japan, leading toward understanding of Oriental culture.

**307 Humanities — Great Books (4)**

Prereq: jr and sr only. (fall) Ancient classics of Western civilization (Greek, Roman, Biblical) leading toward understanding of cultural heritage. Guidance in critical thinking, reading, and writing about those works. (Not recommended for students who have taken Humanities 107.)

**308 Humanities — Great Books (4)**

Prereq: jr and sr only. (winter) Medieval and Renaissance classics of Western civilization.

**309 Humanities — Great Books (4)**

Prereq: jr and sr only. (spring) Modern classics of Western civilization (18th-20th centuries).

## FILM

**201 Introduction to Film I (4) (2H)**

Prereq: soph rank. (fall) Studies in the history of world cinema, from 1895 to the present. Weekly screenings of silent and sound, American and international films.

**202 Introduction to Film II (4) (2H)**

Prereq: soph rank. (winter) Introduction to film analysis, with emphasis on formal aspects of film art such as sound, lighting, mise-en-scene, etc. Weekly screenings.

**203 Introduction to Film III (4) (2H)**

Prereq: soph rank. (spring) Special topics in film styles, genres, movements, and forms. Weekly screenings.

**338 Studies in the Documentary Film (3)**

Prereq: 203. (winter) Special topics in the history, theory and criticism of documentary film and video. Weekly screenings.

**340 Film Techniques (4)**

Prereq: 201. Introduction to motion picture production techniques. Students will design, shoot, and edit their own projects.

**341 Advanced Super-8 Production (4)**

Prereq: 340 or perm. Advanced workshop in super-8 production for students working on independent film projects.

**343 Scriptwriting (4)**

Prereq: 201 or 202. Introduction to craft of developing narrative screenplay. Workshop/tutorial approach to study of screenplay structure, format, dialogue, and theory culminating in a 20-30 minute completed script.

**344J The Practice of Film Criticism (4) (1J)**

Prereq: 201 or 202. Survey of film criticism examining styles and techniques of established film critics. Students assigned series of exercises in critical writing. Meets junior-level English requirement.

**361 Motion Picture Production I (5)**

Prereq: 340 and perm. (fall) Professional 16mm film production. Instruction in basic camera and lighting technique, elementary film structure, and bench editing leading to production of individual silent film projects.

**362 Motion Picture Production II (5)**

Prereq: 361 and perm. (winter) Continuation of 361 introducing sound motion picture shooting and editing techniques. A and B roll preparation.

**363 Motion Picture Production III (5)**

Prereq: 362 and perm. (spring) Continuation of 362. Advanced sound motion picture production techniques.

**421 Film and Culture (4)**

Prereq: 201 or perm. Analysis of the relationship between film and culture, with emphasis on how cultural meanings influence film aesthetics and the critical assessment of the medium. Films of several filmmaking nations such as Brazil, China, India, Sweden, and the United States will be screened for study.

**422 International Cinema (4)**

Prereq: 201 or perm. The development of a nation's or cultural region's films is traced, with emphasis on contemporary works. Cultures under study will vary quarterly and may include the films of Brazil, China, West Germany, Eastern Europe, Italy, Southeast Asia, etc.

**423 Film and Anthropology (4)**

Prereq: 201 or perm. The aesthetics and uses of film and related technologies in the study of both western and nonwestern peoples is studied, with emphasis on the ethnographic and documentary film. Assignments include field exercises with image-making equipment.

**431 Film History I (4)**

Prereq: 201, 202, or perm. (fall) Advanced study of the history and historiography of the motion picture. Emphasis on alternatives to the film canon and revisionist approaches to film history. Weekly screenings.

**432 Film History II (4)**

Prereq: 201, 202, or perm. (winter) Studies in the history of international silent and sound documentary film. Weekly screenings.

**433 Film History III (4)**

Prereq: 201, 202, or perm. Studies in the history of international silent and sound experimental film. Weekly screenings.

**451 Film Theory and Criticism I (4)**

Prereq: 203 or perm. (fall) Introductory survey of classical and contemporary approaches to film theory and criticism. Weekly screenings.

**452 Film Theory and Criticism II (4)**

Prereq: 451 or perm. (winter) Advanced study of classical and contemporary approaches to film theory and criticism. Weekly screenings.

**453 Film Theory and Criticism III (4)**

Prereq: 452 or perm. (spring) Special topics in film theory and criticism, including auteurism, structuralism, formalism, and feminism. Weekly screenings.

**471 Film Topics Seminar (1-5)**

Prereq: perm. (fall) Investigation of selected motion picture topic announced in advance of registration. Focus may be scholarly/critical, industry related, or aspect of motion picture production or screenwriting. Topics and credit hours vary.

**472 Film Topics Seminar (1-5)**

Prereq: perm. (winter) See 471 for description.

**473 Film Topics Seminar (1-5)**

Prereq: perm. (spring) See 471 for description.

**480 Individual Production Problems (1-5)**

Prereq: perm. Individual production of motion picture. May be repeated.

**481 Individual Readings (1-5)**

Prereq: perm. Readings and reports on works related to motion pictures. Reading list is selected by student in consultation with faculty member. May be repeated.

**482 Independent Study (1-5, max 10)**

Prereq: perm. Advanced individual creative or scholarly work in film.

## FINANCE

The finance major prepares professionals who are concerned with development and utilization of funds for economic and social purposes.

Coursework is available in the fields of financial management, commercial banking, financial institutions, security markets, and risk and insurance.

In addition to the B.B.A. degree requirements, a student majoring in finance must complete 24 hours of finance courses at the 300 or 400 level including 327.

**102 Personal Money Management (4)**

Prereq: not open to jrs and srs. How to live better financially. Relation of personal goals to money management in terms of expenditures, savings, and tax considerations. Financial media that serve the individual such as life insurance, savings, securities, and consumer and mortgage credit.

**301 Introduction to Finance (4)**

Prereq: not open to fr or soph or those who have the FIN 102 or to B.B.A. students. Problems in managing personal finances. Budgeting expenditures and savings. Planning life insurance program. Investment in savings accounts, securities, and other financial assets. Use of consumer and mortgage credit. Personal taxes.

**325 Managerial Finance (4)**

Prereq: ACCT 202, QBA 201, jr rank. Role of financial management in business enterprise; financial analysis; planning needs for short-term and long-term funds; planning for profits; capital budgeting; internal management of working capital and income; raising funds to finance growth of business enterprises.

**327 Banking and the Financial System (4)**

Prereq: 325 and jr rank and perm. Functioning of commercial banking system and other financial institutions. Flow of funds and interest-price movements in money and capital markets. Supply of loanable funds and demand for funds in mortgage loan market, consumer credit market, corporate securities markets, and markets for government securities and municipal obligations. Consideration of effects on financial markets of Federal Reserve and Treasury policies.

**331 Risk and Insurance (4)**

Prereq: jr rank and perm. Social importance of risk and its place in personal, business, and national life, including principles and methods of handling risk. Special interest in technique of insurance.

**341 Investments (4)**

Prereq: 325; jr rank, and perm. Principles in determination of investment media for individual and institutional portfolios. Sources of investment information; analysis of financial statements; investment risks and yields. Securities markets and their behavior.

**428 Management of Financial Institutions (4)**

Prereq: 327 or perm. Analysis of objectives, functions, practices, and problems of financial institutions as viewed by management of these institutions.

**436 Life Insurance (4)**

Prereq: 331 and perm. Fundamental economics of life insurance. Principles and practices of life insurance including types of contracts, group and industrial insurance, and annuities.

**444 Futures, Markets, and Institutions (4)**

Prereq: 327 or perm. Description of futures markets, trading, and institutions. Text will be supplemented by current readings and futures trading simulations on the part of the students.

**445 Portfolio Management (4)**

Prereq: 341 and perm. Decision-making processes in management of individual and institutional securities portfolios. Theoretical foundations of portfolio selection and construction. Model-building and other criteria applicable to selection, risk-return tradeoffs, revision and evaluation of portfolio performance. Applications of computer technology and other quantitative techniques to different aspects of portfolio management.

**450 Credit and Lending Principles of Financial Institutions (4)**

Prereq: 325. Provides examination of basic functions involved in supplying credit to borrowers by financial institutions. Organizational framework and division aspects of process studied. Significant policy issues and implications covered.

**452 Small Business Finance (4)**

Prereq: 325 and ACCT 218. Application of basic financial management techniques to small business environment (100 or fewer employees). Problems faced by persons who start small businesses and recommendations for alternative solutions to most commonly discovered problems. Micro view, nuts-and-bolts approach used throughout course, but consistent with broad macro overview set of company objectives.

**453 Real Estate Finance (4)**

Prereq: 325 and perm. Financial and investment analysis in purchase and sale of real properties, including single-family dwellings and income properties. Income and risk analysis in real estate investment. Instruments of real estate finance and institutional arrangements in mortgage markets. Government and mortgage markets. Flow of funds and credit conditions in mortgage markets.

**455 International Finance (4)**

Prereq: 325 or perm. Problems in international finance. Financing international trade and other transactions; foreign exchange market, exchange market, and exchange rates; international payments system. Foreign central banking and current developments in international financing cooperation.

**461 Problems in Business Finance (4)**

Prereq: 325 and perm. Case study of financial management in business enterprises. Planning current and long-run financial needs, profit planning, allocation of funds, raising funds, dividend policies, expansion and combination, recapitalization and reorganization.

**463 Capital Allocation (4)**

Prereq: 325 and perm. Planning capital outlays. Methods for ranking investment proposals. Theories of financial structure and cost of capital. Approaches to investment decisions under conditions of uncertainty.

**465 Mathematical Analysis of Financial Decisions (4)**

Prereq: 325 and perm. Application of quantitative methods to financial management, with special emphasis on systems approach to evaluating proposed financial decisions.

**491 Seminar (3, 4, or 5)**

Prereq: perm. Selected topics of current interest in finance area.

**497 Independent Research (1-4)**

Prereq: perm. Research in selected fields of finance under direction of faculty member.

**498 Internship (1-4)**

Prereq: perm.

## FOREIGN LANGUAGES AND LITERATURES

### Department of Linguistics

**African, Asian, and Middle Eastern Languages** are administered by the Department of Linguistics. A major in these languages

is not offered. An undergraduate seeking a certificate in African or Asian studies may choose three quarters of an appropriate African or Asian language as part of the course requirements.

### Department of Modern Languages

**Germanic, Romance, and Slavic Languages** are included in the offerings of the Department of Modern Languages. Majors are offered in French (major code #5221), German (major code #5222), and Spanish (major code #5225).

The major requirement for the A.B. degree in French or German is a minimum of 36 quarter hours beyond 213. In Spanish the requirement is 40 quarter hours beyond 213. Specific course requirements for French and German are 341, 342, 343, 348 or 349, 355, 356, and at least three courses at the 400 level which should include courses in both language and literature. Spanish majors must, in addition to these, complete course 354.

Spanish majors must take one of the following courses: 443, 444, 447, or 448 as part of the 400-level requirement. A modern languages major is not permitted to take courses in the major subject on the pass/fail basis. Should a student receive a D in a course required for the major, he or she must repeat the course until at least a C is made. Majors are strongly urged to study abroad in one of the department's programs. Suggested electives for majors are classical languages, comparative literature, cultural anthropology, English, fine arts, history of the country in the student's major interest, and linguistics.

Requirements for the B.S. in education degree with a comprehensive program in a modern foreign language are stated in the College of Education section of this catalog. Students wishing to complete teacher certification requirements as A.B. degree candidates should obtain a brochure in the Department of Modern Languages, 220 Ellis Hall, for an explanation of the requirements. Prospective teachers are urged to spend at least one quarter in a country of their major language.

A minor requiring a minimum of 24 hours of language courses beyond 213 is offered in French, German, Russian, or Spanish. A grade of C or better must be received in a course for those hours to count toward a minor. There are no specific course requirements, but the student should observe prerequisites and course sequences. A student should consult the chair of the majors committee in modern languages to develop a minor.

A student who is being certified in one high school or special fields major can be certified in a language minor area (French, German, or Spanish) by completing 45 credit hours in the minor language, including: 341-342-343 (12 hours); one of 348, 349, 355, or 356 (4 hours); one of 437 or 439 (4 hours); and two or more hours of literary studies. Depending on the student's background, up to 24 hours of beginning and intermediate language (111-213) may be waived, with the waived hours noted on the student's transcript.

Language laboratory facilities include 150 student booths with individual cassette recorders, as well as a computer lab with 30 stations. Foreign-language television is received via satellite and available in the language lab or classrooms. Classrooms have speakers connected to a central console capable of piping in recorded material.

The department has chapters of Delta Phi Alpha, Phi Sigma Iota, and Sigma Delta Pi. The following study abroad programs are available through the department. *Austria*: spring quarter in Salzburg offers beginning through advanced German. *France*: spring quarter in Tours offers courses in beginning through advanced French. *Mexico*: Portales — winter quarter in Merida offers intermediate Spanish and coursework in Latin American area studies.

For information on the honors tutorial programs in French and Spanish, see catalog section on the Honors Tutorial College.

### Department of Classical Languages

**Greek and Latin Languages**, as well as classical archaeology and classical languages in English, are offered through the Department of Classical Languages.

The Latin major requirement for the A.B. degree is a minimum of 39 hours above courses 111-112-113, with at least nine hours of 400-level courses consisting of CLNG 401, LAT 433, and other 400-level work in Latin.

The department is working with the appropriate bodies toward the establishment of a major in Greek. For details, consult the department.

## African and Asian Literatures in English

Ohio University offers courses at both the undergraduate and graduate levels in the literatures of Africa and Asia. The Department of Linguistics teaches Southeast Asian literature and the Department of English teaches courses in African and Oriental literatures. Students wishing to fulfill requirements for the undergraduate certificate or the M.A. degree in either African or Southeast Asian studies should consult the departments concerned and the appropriate area studies director. (For description of the Southeast Asian literature courses see Index; for courses in African and Oriental literatures, see English Language and Literature in the Courses of Instruction section.)

## Arabic (Middle Eastern)

- 111 Elementary Arabic (4)**  
(fall) Beginning course of 3-qtr 1st-yr sequence.
- 112 Elementary Arabic (4)**  
Prereq: 111 or equiv. (winter) Continuation of 111.
- 113 Elementary Arabic (4)**  
Prereq: 112 or equiv. (spring) Continuation of 112.
- 211 Intermediate Arabic (4)** (2T)  
Prereq: 113 or equiv. (fall) 1st course of 3-qtr Intermediate-level sequence.
- 212 Intermediate Arabic (4)** (2T)  
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Arabic (4)** (2T)  
Prereq: 212 or equiv. (spring) Continuation of 212.

## Chinese (Asian)

- 111 Elementary Chinese (4)**  
(fall) Beginning course of 3-qtr 1st-yr sequence.
- 112 Elementary Chinese (4)**  
Prereq: 111 or equiv. (winter) Continuation of 111.
- 113 Elementary Chinese (4)**  
Prereq: 112 or equiv. (spring) Continuation of 112.
- 211 Intermediate Chinese (4)** (2T)  
Prereq: 113 or equiv. (fall) 1st course of 3-qtr Intermediate-level sequence.
- 212 Intermediate Chinese (4)** (2T)  
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Chinese (4)** (2T)  
Prereq: 212 or equiv. (spring) Continuation of 212.
- 311 Advanced Chinese (4)**  
Prereq: 213 or equiv. (fall) Beginning of advanced-level sequence.
- 312 Advanced Chinese (4)**  
Prereq: 311 or equiv. (winter) Continuation of 311.
- 313 Advanced Chinese (4)**  
Prereq: 312 or equiv. (spring) Continuation of 312.

## Classical Archaeology

- 201 Introduction to Archaeology — Egypt (5)**  
(winter) Aims, methods, and techniques; general types of archaeological work and excavation. Open to students who have had 203 and/or 352, as well as beginners.
- 203 Introduction to Archaeology — Rome (5)**  
(winter) *H. Hultgren*. Similar to 201, but with emphasis on Roman sites and antiquities. Open to students who have had 201 and/or 352, as well as to beginners.

## 352 Archaeology of Greece (5)

Prereq: 18 hrs foreign language; or 12 hrs history or art history. (spring) Archaeology of Greece and Aegean Islands, with emphasis on Minoan and Mycenaean civilizations.

## Classical Languages in English

The lectures and readings for these courses are in English, and the courses may count as part of the humanities area requirement of the College of Arts and Sciences. These courses cannot count as part of the foreign language requirement of the College of Arts and Sciences.

- 127 Greek and Latin Words in English (4)** (2H)  
General and technical vocabulary derived from Greek and Latin. No knowledge of Greek or Latin required. No credit toward meeting foreign language requirement.
- 234 Classical Mythology (4)** (2H)  
Introduction to classical mythology; readings and discussions of myths and their interpretations. No knowledge of Greek or Latin required. No credit toward meeting foreign language requirement.
- 235 Classical Literature in Translation (4)** (2H)  
Reading of Greek and Latin literature in English translation. May be counted as part of requirements for humanities of College of Arts and Sciences. May not be counted toward major in Latin. No knowledge of Greek or Latin required. No credit toward meeting foreign language requirement.
- 236 Classical Literature in Translation (4)** (2H)  
Continuation of 235.
- 237 Classical Literature in Translation (4)** (2H)  
Continuation of 236.
- 301 Love in Antiquity (4)**  
Reading and discussion of major literary and philosophical treatments of love in Graeco-Roman tradition. All readings are in English translation. No knowledge of Greek or Latin required.
- 311 Gods and Heroes in Greek Epic (4)**  
A survey of the history, literature, and values of the Greek Heroic period: Mycenaean heroes (Achilles, Agamemnon, Ajax, Odysseus, Jason, etc.), and the Epic tradition (Homer, Hesiod, Apollonius) who passed on their stories to later generations of Greeks.
- 312 Greek Tragedy (4)**  
A survey of Greek tragedy in English translation: extensive reading from Aeschylus, Sophocles, and Euripides. Study of the historical and cultural setting and the literary aspect of the plays.
- 313 Greek Sophists and Orators (4)**  
An introduction to the new modes of oratory and argumentation which flourished in the context of fifth-century B.C. Greek democracy.
- 401 The Life of the Romans (4)**  
Prereq: 12 hrs CLNG or 12 hrs history and antiquities. (on demand) Family, house, transportation, public amusements. Illustrations from archaeological evidence. No knowledge of Latin required. No credit toward meeting foreign language requirement.

## French (Romance)

- 111 Elementary French (4)**  
Beginning course of 3-qtr, 1st-yr sequence. Basic grammatical concepts and patterns. Emphasis on development of reading, listening comprehension, speaking, and writing skills. Basic text and workbook used. Lab required.
- 112 Elementary French (4)**  
Prereq: 111. Continuation of 111. Basic text, workbook, and readings used. Lab required.
- 113 Elementary French (4)**  
Prereq: 112. Continuation of 112. Basic text, workbook, and readings used. Lab required.



- 211 Intermediate French (4) (2H)**  
Prereq: 113 or 2 or 3 yrs h.s. French. 1st course of 3-qr intermediate-level sequence. Intensive review of grammar. Additional readings with discussion in French. Supplemental cultural material.
- 212 Intermediate French (4) (2H)**  
Prereq: 211 or perm. Continuation of 211.
- 213 Intermediate French (4) (2H)**  
Prereq: 212 or 4 yrs h.s. French. Reading and discussion of selected modern works. Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.
- 298 Independent Study in French (1-2, max 6)**  
Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving French language. Does not count toward major or minor. Does not satisfy language requirement.
- 341 Advanced Conversation and Composition (4)**  
Prereq: 213 or perm. Speaking and writing based on readings and assigned topics. Grammar review.
- 342 Advanced Conversation and Composition (4)**  
Prereq: 341 or perm. Continuation of 341.
- 343 Advanced Conversation and Composition (4)**  
Prereq: 342 or perm. Continuation of 342.
- 348 French Civilization and Culture (4)**  
Prereq: 213 or perm. (fall, winter) Social, political, and cultural history of France from Middle Ages to Revolution. Readings, discussions, class reports, and short papers.
- 349 French Civilization and Culture (4)**  
Prereq: 213 or perm. (spring) Continuation of 348, covering 1799 to present. France in the modern world.
- 355 Introduction to French Literature (4)**  
Prereq: 213. Reading and discussion of major French literary works from Middle Ages through 18th century.
- 356 Introduction to French Literature (4)**  
Prereq: 213. Extensive reading and discussion of major French literary works of 19th and 20th centuries.
- 415 French Literature of the Renaissance (4)**  
Prereq: 355 and 356. Major 16th-century poets, including Du Bellay and Ronsard.
- 416 French Literature of the Renaissance (4)**  
Prereq: 355 and 356. Major 16th-century prose writers, including Rabelais and Montaigne.
- 418 17th Century French Literature (4)**  
Prereq: 355 and 356. Works by numerous authors, including at least some of following: Descartes, Pascal, Mme de La Fayette, La Rochefoucauld, La Bruyère, La Fontaine, and Boileau.
- 419 17th Century French Literature (4)**  
Prereq: 355 and 356. Major plays of Corneille, Racine, and Molière.
- 423 18th Century (4)**  
Prereq: 355 and 356. French literature and thought in Age of Enlightenment.
- 424 18th Century (4)**  
Prereq: 355 and 356. Continuation of 423.
- 425 Romanticism (4)**  
Prereq: 355 and 356. Romanticism in drama, poetry, and fiction of 1st half of 19th century.
- 426 Realism and Naturalism (4)**  
Prereq: 355 and 356. Major fictional works of 19th century.
- 427 French Poetry in the Second Half of the 19th Century (4)**  
Prereq: 355 and 356. Poetry of Baudelaire, Verlaine, Rimbaud, Mallarmé, and others.
- 429 20th Century French Literature I (4)**  
Prereq: 355 and 356. French prose fiction before WWII.
- 431 20th Century French Literature II (4)**  
Prereq: 355 and 356. French prose fiction since WWII.
- 433 20th Century French Literature III (4)**  
Prereq: 355 and 356. French drama of the 20th century.

**435 Proseminar (1-4, max 12)**

Prereq: perm. Subject will vary. May be repeated when subject changes.

**437 Applied Phonetics (4)**

Prereq: perm. (fall) Systematic study of segmental and prosodic elements of French pronunciation including extensive oral practice.

**439 Modern French Usage (4)**

Prereq: 343 or perm. (winter) Fine points of grammar. Practice in composition and analysis of texts.

**441 Stylistics (4)**

Prereq: 343 or perm. (spring) Composition. *Explication de texte*. Translation of English into French. Study of French prosody.

**498 Independent Study in French (1-2, max 4)**

Prereq: 8 credits at 300 level or perm of dept chair. Directed individual readings, discussion, and reports in language at advanced level. Does not count toward 400-level hrs required for major. Maximum of 2 credits may count toward minor.

## Foreign Literatures in English

The lectures and readings for these courses are in English and are aimed at the entire University community. While they are not to be counted for a major in a modern foreign language, these courses may be counted toward the humanities area requirement of the College of Arts and Sciences. No credit toward meeting the foreign language requirement.

**334 Portuguese and Brazilian Literature in English (4)**

Literature of Portugal or literature of Brazil in English translation. May be repeated for credit when subject changes.

**335 Italian Literature in English (4) (2H)**

Famous literary works of best Italian authors, presented in English. May be repeated for credit when subject changes.

**336 Spanish Literature in English (4) (2H)**

Topics may deal with either Spanish or Latin American literature. May be repeated for credit when topic changes.

**337 French Literature in English (4) (2H)**

Literary works by authors of French expression, read and discussed in English. May be repeated for credit when subject changes.

**338A German Literature in English (4) (2H)**

Survey of masterpieces of German literature, presented in English. May be repeated for credit when subject changes.

**338B German Novel in English (4) (2H)**

Introduction to major German, Swiss, and Austrian novelists in English translation.

**339A Russian Literature in English (4)**

Survey of Russian literature from beginnings to revolution, presented in English.

**339B Soviet Literature in English (4)**

Major developments of Russian literature from 1917 to present day.

## German (Germanic)

**111 Elementary German (4)**

Introduction to pronunciation and basic grammar. Development of comprehension and speaking skills. Lab required. Beginning course of 3-qr 1st-yr sequence.

**112 Elementary German (4)**

Prereq: 111. Continuation of 111. Lab required.

**113 Elementary German (4)**

Prereq: 112. Continuation of 112. Continued development of skills of oral and written production and comprehension. Lab required.

**211 Intermediate German (4) (2H)**  
Prereq: 113 or 2 or 3 yrs h.s. German. Continued development of listening comprehension, reading, writing, and speaking skills. Grammar review. Lab required. 1st course of 3-qtr intermediate-level sequence.

**212 Intermediate German (4) (2H)**  
Prereq: 211 or perm. Continuation of 211. Emphasis on discussion of modern texts. Continued development of listening comprehension and speaking and writing skills. Lab required.

**213 Intermediate German (4) (2H)**  
Prereq: 212 or 4 yrs h.s. German. Modern German texts are read and form basis for discussions and written assignments. Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.

**235 German Drama on Stage (1-4)**  
(winter) Presentation of German drama on stage. Private coaching in pronunciation and inflection of German. Credit varies according to role of student. May be repeated for credit with perm.

**298 Independent Study in German (1-2, max 3)**  
Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving German language. Does not count toward major or minor. Does not satisfy language requirement.

**341 Advanced Conversation and Composition (4)**  
Prereq: 213 or perm.

**342 Advanced Conversation and Composition (4)**  
Prereq: 341 or perm.

**343 Advanced Conversation and Composition (4)**  
Prereq: 342 or perm.

**348 German Culture and Civilization (4)**  
Prereq: 213 or perm. (fall, winter) Historical, intellectual, and artistic aspects of German, Austrian, and Swiss culture from earliest times to present.

**349 German Culture and Civilization (4)**  
Prereq: 213 or perm. (spring) Continuation of 348.

**355 Introduction to German Literature (4)**  
Prereq: 213. Study of major literary works, with emphasis on 18th and 19th centuries.

**356 Introduction to German Literature (4)**  
Prereq: 213. Study of major literary works of 20th century.

**425 19th Century German Literature (4)**  
Prereq: 355 and 356.

**426 19th Century German Literature (4)**  
Prereq: 355 and 356.

**427 19th Century German Literature (4)**  
Prereq: 355 and 356.

**429 20th Century German Literature (4)**  
Prereq: 355 and 356.

**430 20th Century German Literature (4)**  
Prereq: 355 and 356.

**431 20th Century German Literature (4)**  
Prereq: 355 and 356.

**433 German Lyric Poetry (4)**  
Prereq: 355 and 356. Interpretative and critical study of German lyric poetry.

**435 Proseminar (1-4, max 12)**  
Prereq: perm. Intensive analysis of major author, literary genre, or theme. When subject is changed, student may reenroll.

**437 Phonology (4)**  
Prereq: perm. (fall) Problems in description and teaching of German sound system. Training in phonetic and phonemic transcription. Pronunciation drills. Contrastive analysis.

**439 Grammatical Structure (4)**  
Prereq: 343 or perm. (winter) Selected problems in analysis and classroom presentation of German morphology and syntax.

**441 Stylistics (4)**  
Prereq: 343 or perm. (spring) Advanced writing and stylistic analysis. Practice in variety of nonfiction prose techniques.

**447 Readings in German Literature from the 12th through the 17th Centuries (4)**

Prereq: 355 and 356. Literature of Courtly Period, Renaissance, and Reformation and Baroque.

**448 Readings in German Literature from the 12th through the 17th Centuries (4)**

Prereq: 355 and 356. Continuation of 447.

**453 The Age of Goethe (4)**

Prereq: 355 and 356. Major works of Lessing, Schiller, and Goethe.

**454 The Age of Goethe (4)**

Prereq: 355 and 356. Continuation of 453. See 453 for description.

**455 The Age of Goethe (4)**

Prereq: 355 and 356. Continuation of 453 and 454. See 453 for description.

**498 Independent Study in German (1-2, max 4)**

Prereq: 8 credits at 300 level or perm of dept chair. Directed individual readings, discussion, and reports in language at advanced level. Does not count toward 400-level hrs required for major. Maximum of 2 credits may count toward minor.

## Greek

**111 Beginning Greek (4)**

Grammar, vocabulary, and reading of ancient Greek. Students will be introduced to Ionic, Attic, and Koine (New Testament) dialects.

**112 Beginning Greek (4)**

Prereq: 111. Continuation of 111. See 111 for description.

**113 Beginning Greek (4)**

Prereq: 112. Continuation of 111-112. See 111 for description.

**211 Greek Prose and Poetry (4) (2H)**

Prereq: 113. Review of language principles. Readings adapted to needs and interests.

**212 Greek Prose and Poetry (4) (2H)**

Prereq: 211. Continuation of 211. See 211 for description.

**213 Greek Prose and Poetry (4) (2H)**

Prereq: 212. Continuation of 211-212. See 211 for description.

**311 Greek Epic Poets (4)**

Readings in Greek from Homer and Hesiod.

**312 Greek Tragedy (4)**

Readings in Greek from Aeschylus, Sophocles, and/or Euripides.

**313 Readings in Greek Intellectual History (4)**

Readings in Greek from Plato, Thucydides, and/or the Sophists.

**314 Greek Historians (4)**

Readings in Greek from Herodotus and Thucydides.

**315 Greek Comedy (4)**

Readings in Greek from Aristophanes.

**316 The Greek New Testament and the Milieu of Early Christianity (4)**

Readings in Greek from the New Testament, the early Greek fathers, and/or non Christian writers of interest for the study of early Christianity.

**409 Advanced Greek Readings (2-4, max 18)**

Prereq: 21 hrs. (on demand) Selections adapted to needs and interests.

## Indonesian/Malaysian (Asian)

**111 Elementary Indonesian/Malaysian (4)**

(fall) Beginning course of 3-qtr 1st-yr sequence.

**112 Elementary Indonesian/Malaysian (4)**

Prereq: 111 or equiv. (winter) Continuation of 111.

**113 Elementary Indonesian/Malaysian (4)**

Prereq: 112 or equiv. (spring) Continuation of 112.

- 211 Intermediate Indonesian/Malaysian (4) (2T)**  
Prereq: 113 or equiv. (fall) 1st course of 3-qr intermediate-level sequence.
- 212 Intermediate Indonesian/Malaysian (4) (2T)**  
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Indonesian/Malaysian (4) (2T)**  
Prereq: 212 or equiv. (spring) Continuation of 212.
- 311 Advanced Indonesian/Malaysian (4)**  
Prereq: 213 or equiv. (fall) Beginning of advanced-level sequence.
- 312 Advanced Indonesian/Malaysian (4)**  
Prereq: 311 or equiv. (winter) Continuation of 311.
- 313 Advanced Indonesian/Malaysian (4)**  
Prereq: 312 or equiv. (spring) Continuation of 312.
- 499 Special Studies (1-3)**  
Independent study of topic of interest in Indonesian/Malaysian language or literature.

## Italian (Romance)

- 111 Elementary Italian (4)**  
(fall) Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary Italian (4)**  
Prereq: 111. (winter) Continuation of 111.
- 113 Elementary Italian (4)**  
Prereq: 112. (spring) Continuation of 112.
- 211 Intermediate Italian (4) (2H)**  
Prereq: 113 or 2-3 yrs h.s. Italian. (fall) 1st course of 3-qr intermediate-level sequence.
- 212 Intermediate Italian (4) (2H)**  
Prereq: 211 or perm. (winter) Continuation of 211.
- 213 Intermediate Italian (4) (2H)**  
Prereq: 212 or 4 yrs h.s. Italian. (spring) Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.
- 298 Independent Study in Italian (1-2, max 6)**  
Prereq: 213 or perm of Instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving Italian language. Does not satisfy language requirement.
- 341 Advanced Conversation and Composition (4)**  
Prereq: 213 or perm. (fall)
- 342 Advanced Conversation and Composition (4)**  
Prereq: 341 or perm.
- 343 Advanced Conversation and Composition (4)**  
Prereq: 342 or perm.
- 348 Italian Civilization and Culture (4)**  
Prereq: 213 or perm. (winter) Historical and cultural development of Italy from Middle Ages to Renaissance.
- 349 Italian Civilization and Culture (4)**  
Prereq: 213 or perm. (spring) Continuation of 348, covering period from Renaissance to present.
- 355 Introduction to Italian Literature (4)**  
Prereq: 213 or perm.
- 356 Introduction to Italian Literature (4)**  
Prereq: 213 or perm.

## Japanese (Asian)

- 111 Elementary Japanese (4)**  
(fall) Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary Japanese (4)**  
Prereq: 111 or equiv. (winter) Continuation of 111.
- 113 Elementary Japanese (4)**  
Prereq: 112 or equiv. (spring) Continuation of 112.

- 211 Intermediate Japanese (4) (2T)**  
Prereq: 113 or equiv. (fall) First course of 3-qr intermediate-level sequence.
- 212 Intermediate Japanese (4) (2T)**  
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Japanese (4) (2T)**  
Prereq: 212 or equiv. (spring) Continuation of 212.
- 250 Japanese Language and Culture (4) (2T)**  
(spring) Introduction to cultural traditions of Japan and its language. English translations are used.
- 311 Advanced Japanese (4)**  
Prereq: 213 or equiv. (fall) Beginning of advanced-level sequence.
- 312 Advanced Japanese (4)**  
Prereq: 311 or equiv. (winter) Continuation of 311.
- 313 Advanced Japanese (4)**  
Prereq: 312 or equiv. (spring) Continuation of 312.

## Latin

- 111 Beginning Latin (4)**  
Grammar, vocabulary, and reading.
- 112 Beginning Latin (4)**  
Prereq: 111. Continuation of 111. See 111 for description.
- 113 Beginning Latin (4)**  
Prereq: 112. Continuation of 111-112. See 111 for description.
- 211 Intermediate Latin (4)**  
Prereq: 113 or 2-3 yrs h.s. Latin. Review of h.s. Latin with reading of easy prose.
- 212 Intermediate Latin (4)**  
Prereq: 211. Continuation of 211. Reading of Vergil.
- 213 Intermediate Latin (4)**  
Prereq: 212. Continuation of 211-212. See 212 for description.
- 351 Latin Prose and Poetry (4)**  
Prereq: 213 or 4 yrs h.s. Latin, or 3 yrs h.s. Latin and perm. Review of essential Latin. Reading of Cicero's essays, play of Plautus or Terence, Horace's *Odes* and *Epodes*.
- 352 Latin Prose and Poetry (4)**  
Prereq: 213 or 4 yrs h.s. Latin or 3 yrs h.s. Latin and perm. Continuation of 351. See 351 for description.
- 353 Latin Prose and Poetry (4)**  
Prereq: 213 or 4 years h.s. Latin or 3 yrs h.s. Latin and perm. Continuation of 351-352. See 351 for description.
- 364 The Teaching of High School Latin (4)**  
Prereq: 213. (on demand) Content and methods of teaching h.s. Latin courses.
- 411 Latin Literature of the Republic (4)**  
Prereq: 353. Selections from works of Plautus, Terence, Caesar, Cicero, Lucretius, Catullus, and Sallust.
- 412 Latin Literature of the Republic (4)**  
Prereq: 353. Continuation of 411. See 411 for description.
- 413 Latin Literature of the Republic (4)**  
Prereq: 353. Continuation of 411-412. See 411 for description.
- 415 Latin Literature of the Early Empire (4)**  
Prereq: 353. Selections from works of Vergil, Horace, Livy, Ovid, Martial, Tacitus, Juvenal, and Pliny the Younger.
- 416 Latin Literature of the Early Empire (4)**  
Prereq: 353. Continuation of 415. See 415 for description.
- 417 Latin Literature of the Early Empire (4)**  
Prereq: 353. Continuation of 415-416. See 415 for description.
- 419 Readings in Latin Literature (4)**  
Prereq: 353. Selections complement students' other readings in Latin literature.
- 420 Readings in Latin Literature (4)**  
Prereq: 353. Continuation of 419. See 419 for description.

**421 Readings in Latin Literature (4)**

Prereq: 353. Continuation of 419-420. See 419 for description.

**433 Advanced Latin Syntax (4)**

Prereq: 353. (on demand) Writing of Latin prose.

**440 Special Work in Latin (1-6, max 12)**

Prereq: 353. (on demand) Specialized work in selected phases of classical study.

## Modern Languages (Introductory Culture and Civilization; Professional Courses)

**NOTE:** 250A-C, 410, and 445 do not count toward the major. With departmental approval 250A-C may be applied to the Arts and Sciences humanities requirement.

**250A Field Studies in Austria (1-4, max 4)**

Prereq: perm. Designed to introduce participants in study abroad program to various aspects of life in target country.

**250B Field Studies in France (1-4, max 4)**

Prereq: perm. See 250A for course description.

**250C Field Studies in Mexico (1-4, max 4)**

Prereq: perm. See 250A for course description.

**410 The Language Laboratory: Media in Foreign Language Teaching (3)**

Prereq: foreign language courses numbered 213 or courses in linguistics. Use of language lab and associated media as correlated with modern language classroom; instruction in selection, preparation, and use of instructional materials and tests, and in successful operation of lab and classroom equipment. Required of majors who plan to teach.

**445 Teaching of Modern Foreign Languages (3)**

Prereq: perm. Not to be counted as hours above 200 for A.B. degree. Study, demonstration, and use of methods and materials for effective modern foreign language instruction. Required of majors who plan to teach.

## Russian (Slavic)

**111 Elementary Russian (4)**

(fall) Beginning course of 3-qr 1st-yr sequence.

**112 Elementary Russian (4)**

Prereq: 111. (winter) Continuation of 111.

**113 Elementary Russian (4)**

Prereq: 112. (spring) Continuation of 112.

**211 Intermediate Russian (4) (2H)**

Prereq: 113 or 2-3 yrs h.s. Russian. (fall) Continued language study. Review of grammar. 1st course of 3-qr intermediate-level sequence.

**212 Intermediate Russian (4) (2H)**

Prereq: 211 or perm. (winter) Continuation of 211. Extensive reading, writing, and oral practice.

**213 Intermediate Russian (4) (2H)**

Prereq: 212 or 4 yrs h.s. Russian. (spring) Accelerated reading, writing, and oral practice. Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.

**298 Independent Study in Russian (1-2, max 6)**

Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving Russian language. Does not count toward minor. Does not satisfy language requirement.

**341 Advanced Conversation and Composition (4)**

Prereq: 213 or perm. (fall)

**342 Advanced Conversation and Composition (4)**

Prereq: 341 or perm. (winter)

**343 Advanced Conversation and Composition (4)**

Prereq: 342 or perm. (spring)

**348 The Cultural History of Russia (4)**

Prereq: 213 or perm. Cultural heritage of Russian people. Origin of Russian literature. Russian chronicles. 3 cycles of *bylina*. Russian ballads. Russian folklore. Readings and lectures in Russian.

**349 The Cultural History of Russia (4)**

Prereq: 213 or perm. Continuation of 348.

**355 Introduction to Russian Literature (4)**

Prereq: 213. Analysis of genres and literary movements.

**356 Introduction to Russian Literature (4)**

Prereq: 213. Continuation of 355.

**397 Introduction to the History of the Russian Language (3)**

Prereq: 213 or 4 yrs h.s. Russian. (spring) Russian phonology, morphology, and syntax from Common Slavic to present. East, West, and South Slavic languages.

## Southeast Asian Literatures in Translation

**340 Traditional Literature of Southeast Asia (3)**

(fall) Survey of traditional literature of Southeast Asia in translation.

**345 Modern Literature of Southeast Asia (3)**

(winter) Survey of modern literature of Southeast Asia in translation.

## Spanish (Romance)

**111 Elementary Spanish (4)**

Development of comprehension, speaking, and reading skills. Basic grammar. Lab required. Beginning course of 3-qr 1st-yr sequence.

**112 Elementary Spanish (4)**

Prereq: 111. Continuation of 111.

**113 Elementary Spanish (4)**

Prereq: 112. Continuation of 112.

**114 Intensive Elementary Spanish (12)**

Intensive development of basic language skills and grammatical principles. Equivalent to 1 yr of beginning language (111-112-113). Lab required.

**211 Intermediate Spanish (4) (2T)**

Prereq: 113 or 2-3 yrs h.s. Spanish. Intensive review of grammar. Additional readings and discussion in Spanish. Supplemental cultural material. Lab requirements may vary. 1st course of 3-qr intermediate-level sequence.

**212 Intermediate Spanish (4) (2T)**

Prereq: 211 or perm. Continued review. Additional literary readings with discussion in Spanish.

**213 Intermediate Spanish (4) (2T)**

Prereq: 212 or 4 yrs h.s. Spanish. Selected readings of 20th-century Spanish dramatists, poets, novelists, and essayists with discussion in Spanish. Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.

**298 Independent Study in Spanish (1-2, max 6)**

Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving Spanish language. Does not count toward major or minor. Does not satisfy language requirement.

**341 Advanced Conversation and Composition (4)**

Prereq: 213 or perm. Conversation based on assigned topics. Writing of short compositions which are also discussed in class.

**342 Advanced Conversation and Composition (4)**

Prereq: 341 or perm. Continuation of speaking with more emphasis on writing skills.

**343 Advanced Conversation and Composition (4)**

Prereq: 342 or perm. Emphasis on writing.

- 348 Spanish Civilization and Culture (4)**  
Prereq: 213 or perm. (fall, winter) Survey of Spanish civilization and culture.
- 349 Spanish American Civilization and Culture (4) (2T)**  
Prereq: 213 or perm. (spring) Survey of Spanish American civilization and culture.
- 350 Mexican Civilization and Culture (4)**  
Prereq: 213. Study of Mexican life, language, art, and their regional variation.
- 351 Mayan Civilization and Culture (4)**  
Prereq: 213 and perm. Examination of Mayan civilization of yesterday and today, with emphasis on its continuing presence in Yucatan.
- 354 Introduction to Spanish Literature (4)**  
Prereq: 213. Selected Spanish and Spanish American plays. Historical developments and movements in Hispanic theater. Terminology. Readings, lectures, and discussion.
- 355 Introduction to Spanish Literature (4)**  
Prereq: 213. Selected Spanish and Spanish American novels and shorter fiction. Historical development and movements in Hispanic narrative form. Terminology. Readings, lectures, and discussion.
- 356 Introduction to Spanish Literature (4)**  
Prereq: 213. Selected Spanish and Spanish American poetry. Historical development and tendencies in Hispanic verse. Movements and terminology. Readings, lectures, and discussion.
- 361 Understanding Spoken Spanish (4)**  
Prereq: 213. Designed to increase students' understanding of spoken Spanish through exposure to and practice with recorded oral materials. Students work with distinct language varieties including dialect variants, commercials, songs, jokes, and broadcasts. Strategies for developing listening skills are presented.
- 425 19th Century Spanish Literature (1800-1850) (4)**  
Prereq: 354, 355, and 356. Romanticism, *costumbrismo*, and other movements in drama, essay, and poetry.
- 427 19th Century Spanish Literature (1850-1900) (4)**  
Prereq: 354, 355, and 356. Evolution of the novel in 19th-century Spain, including novels selected from the work of the following: Valera, Pereda, Galdos, Alas, Pardo Bazan, Blasco Ibanez.
- 429 Generation of '98 (4)**  
Prereq: 354, 355, and 356. Representative works by early 20th-century Spanish writers, including at least some of the following: Azorin, Baroja, Valle-Inclan, A. Machado, Perez de Ayala, Ortega y Gasset, and Juan Ramon Jimenez.
- 432 20th Century Spanish Literature (4)**  
Prereq: 354, 355, and 356. Study of poetry, novel, and drama in Spain since 1925, including works by at least some of the following writers: Lorca, Salinas, Guillen, Aleixandre, Bousono, Valente, A. Gonzalez, Buero, Cela, Delibes, Martin-Santos, J. Goytisolo, Martin Gaité.
- 435 Proseminar (1-4, max 12)**  
Prereq: perm. Subject will vary. May be repeated when subject changes.
- 437 Applied Phonetics (4)**  
Prereq: perm. (fall) Systematic description of the sound system of Spanish.
- 439 Modern Spanish Usage (4)**  
Prereq: 343 or perm. The grammatical structure of modern Spanish.
- 441 Stylistics (4)**  
Prereq: 343 or perm. Analysis of literary styles and study of techniques used to acquire correct style in writing Spanish.
- 443 Survey of Spanish American Literature (4)**  
Prereq: perm. Main movements of Spanish American literature from colonial period to *Modernismo*.
- 444 Survey of Spanish American Literature (4)**  
Prereq: perm. Continuation of 443. Main movements of Spanish American literature from *Modernismo* to contemporary period.
- 447 Themes from Spanish American Prose (4)**  
Prereq: perm.

- 448 Contemporary Spanish American Literature (4)**  
Prereq: perm.
- 453 Drama of the Golden Age (4)**  
Prereq: perm. Works by Lope de Vega, Calderon de la Barca, Tirso de Molina, Juan Ruiz de Alarcon, and related dramatists.
- 455 Novel of the Golden Age (4)**  
Prereq: perm. Picaresque novel, Cervantes' *Novelas Ejemplares*, and other examples of the novel from this period.
- 458 Don Quijote de la Mancha (4)**  
Prereq: perm. Intensive study of Part One and Part Two of Spain's greatest novel.
- 498 Independent Study in Spanish (1-2, max 4)**  
Prereq: 8 credits at 300 level or perm of dept chair. Directed individual readings, discussion, and reports in language at advanced level. Does not count toward 400-level hrs required for major. Maximum of 2 credits may count toward minor.

## Swahili (African)

- 111 Elementary Swahili (4)**  
(fall) Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary Swahili (4)**  
Prereq: 111 or equiv. (winter) Continuation of 111.
- 113 Elementary Swahili (4)**  
Prereq: 112 or equiv. (spring) Continuation of 112.
- 211 Intermediate Swahili (4) (2T)**  
Prereq: 113 or equiv. (fall) 1st course of 3-qr intermediate-level sequence.
- 212 Intermediate Swahili (4) (2T)**  
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Swahili (4) (2T)**  
Prereq: 212 or equiv. (spring) Continuation of 212.
- 311 Advanced Swahili (4)**  
Prereq: 213 or equiv. (fall) Beginning of advanced-level sequence.
- 312 Advanced Swahili (4)**  
Prereq: 311 or equiv. (winter) Continuation of 311.
- 313 Advanced Swahili (4)**  
Prereq: 312 or equiv. (spring) Continuation of 312.

## FRENCH

See Foreign Languages and Literatures.

## GEOGRAPHY

The requirements for geography majors studying for the A.B. or B.S. degrees are a minimum of 55 quarter hours of approved geography courses including 101, 121, one regional, 271 (471 or 474 may be substituted), one technique, 481, and at least 30 hours at the 300 level or above.

Majors are not permitted to take geography and required courses pass/fail.

Students wishing to pursue the B.S. degree must obtain a strong background in math, computer science, and the natural sciences. The selection of specific courses will depend upon the student's interest and advice of the faculty advisor.

A minor in geography will consist of a minimum of 28 hours including GEOG 101, 121, and at least three other courses at the 300 level or above.

- 101 Elements of Physical Geography (5) (2N)**  
Systematic survey of temperature, precipitation, atmospheric and oceanic circulation, and global systems of climate, soils, natural vegetation, and landforms. 4 lec, one 2-hr lab.

# 121 Human Geography (4) (2S)

Examination of spatial dimensions of culture, emphasizing patterns of selected cultural elements — language, religion, population, settlement, political and economic landscapes, and human/environment interactions.

# 131 World Regional Geography: Third World (4) (2T)

Prereq: No credit if previously taken as 140. Survey of selected geographic themes: development; people and resources; human and physical environments; and cultural patterns in Latin America, Africa, the Middle East, and Asia.

# 132 World Regional Geography: Industrial World (4) (2S)

Prereq: No credit if previously taken as 141. Survey of selected geographic themes: development; people and resources; human and physical environments; and cultural patterns in North America, Western and Eastern Europe, the U.S.S.R., Japan, and Australia.

# 201 Environmental Geography (4) (2A)

Geographic survey of environmental changes caused by human activities. Focus on resource availability and use, pollution of air, water, and biosphere, energy problems, interactions of humans with plant and animal communities.

# 232 Geography of Ohio (4)

Prereq: no credit if previously taken as 242. Detailed regional study of physical geography of Ohio and its cultural landscapes, settlement patterns, and economic development.

# 233 Geography of Appalachia (4)

Prereq: no credit if previously taken as 343. Topical and regional survey of Appalachia with emphasis on settlement and rural and urban land use. Examination of national role of Appalachia in coal production, problems of environmental degradation, conservation, and recreation.

# 234 Geography of the United States and Canada (4)

No credit if previously taken as 240. Regional survey of North America including topical treatment of physical and cultural elements and intensive study of smaller regions.

# 241 Global Issues in Environmental Geography (4)

Prereq: 201. An inquiry approach to environmental issues of global scope such as human population growth, energy production and consumption, climatic change, deforestation, species depletion, disposal of wastes. Examination of the sustainability of human and natural systems.

# 260 Maps (4) (2A)

Introduction to map reading, interpretation, and appreciation. Examination of scale, direction, distortion, projections, and the use of maps to show physical and cultural landscapes and as everyday means of communication. 3 lec., one 2-hr lab.

# 271 Analysis of Geographic Data (4)

Prereq: Geography major or perm. No credit if previously taken as 277. Introduction to quantitative analysis in geography. Use of spread sheets and elementary statistical software packages as applied to geographic problems.

# 302 Elements of Meteorology (5)

Prereq: 101. No credit if previously taken as 311. General survey of meteorology with focus on physical principles explaining weather change. 4 lec, one 2-hr lab.

# 303 Elements of Climatology (5)

Prereq: 302. No credit if previously taken as 312. Exchanges of energy and moisture and their significance to human utilization of the earth's surface. 4 lec, one 2-hr lab.

# 304 Observations in Meteorology and Forecasting (2, max, 4)

Prereq: 101, 302. No credit if previously taken as 313. Lab experience in acquisition and measurement of meteorological parameters.

# 321 Population Geography (4)

Prereq: 121 or 201 or perm. No credit if previously taken as 422. Systematic survey of world population problems including distribution, composition, fertility, mortality, density, age-sex structure, and impact of these on world population growth and resources.

# 322 Settlement Geography (4)

Prereq: 121 or perm. No credit if previously taken as 429. Patterns and forms of rural settlement and their relation to environmental, cultural-historical, and economic factors.

# 324 Industrial Geography (4)

Prereq: 121. No credit if previously taken as 330. Industrial Location. Theories of industrial location and factors explaining industrial activity especially as related to economic development.

# 325 Political Geography (4)

Prereq: 121 or perm. Systematic examination of basic approaches, topics, and spatial concepts in political geography. Case studies emphasize nation-state.

# 326 Urban Geography (4)

Prereq: 121 or perm. No credit if previously taken as 230. Study of internal patterns of urban areas of North America.

# 330 Geography of Western Europe (4)

Prereq: 121. No credit if previously taken as 340. Physical, cultural, and economic geography of Western Europe.

# 331 Geography of Africa I (4)

Prereq: 131 or perm. No credit if previously taken as 351. Systematic examination of selected themes in African geography with special emphasis on problems of development.

# 332 Geography of Africa II (4)

Prereq: 131 and 331 or perm. No credit if previously taken as 352. Regional survey of one or more of major areas of tropical Africa.

# 335 Latin America (4)

Prereq: 131 or perm. No credit if previously taken as 355. Regional survey of Latin America with emphasis on problems of social and economic development.

# 338 Southeast Asia (4)

Prereq: 131 or perm. No credit if previously taken as 345. Survey of physical geography, natural resources, population, food production, energy within selected regions.

# 344 Agricultural Ecosystems (4)

Prereq: 201. No credit if previously taken as 331. Agricultural Activity. A spatial perspective of ecological models, concepts, methods of data collection and analysis of agricultural systems of the industrial and developing worlds.

# 350 Land Use Planning (4)

Prereq: jr rank or perm. No credit if previously taken as 420. Survey of land use planning. Zoning, subdivision controls and modifications, rural land use, open space, state land use plans. Case studies from U.S. and Europe.

# 353 Environmental Planning (4)

Prereq: 201, 350. No credit if previously taken as 421. An introduction to the development, implementation, and operation of activities to guide landscape development. Emphasis on interaction between natural and social systems, methods of environmental analysis, and the evolution of environmental planning strategies.

# 360 Elements of Cartography (5)

Prereq: 260, major, jr preference. Introduction to basic design and principles of aesthetically pleasing maps, emphasizing legibility to map user. Pen and ink map construction ranging from simple compilation to scale reduction and multicolor composition. 3 lec, two 2-hr labs.

# 361 Statistical Cartography (5)

Prereq: 360. Cartographic techniques of representing quantitative data on maps. 3 lec, two 2-hr labs.

# 365 Remote Sensing I (5)

Prereq: 260. Principles, techniques, and practice in visual interpretation of air photographic and remote sensing imagery. For geographers, geologists, military, community planners, resource managers, engineers. 4 lec, one 2-hr lab.

# 375J Library Research and Writing (4) (1J)

Prereq: perm. Research materials, methods of investigation, and presentation of geographic data.

# 405 Practicum in Meteorological Forecasting (2-10)

Prereq: 101, 302, 304. No credit if 10 hours previously taken as 314. Lab experience in preparation and dissemination of meteorological forecasts.

# 411 Advanced Physical Geography (4)

Prereq: 101. No credit if previously taken as 301. Application of physical geographic principles to specific research problems.



**427 American Rural Vernacular Architecture (4)**

Prereq: jr rank. No credit if previously taken as 328. Consideration of temporal and spatial characteristics of American rural vernacular buildings and importance of preserving ordinary structures.

**440 Environmental Impact Analysis (4)**

Prereq: 350 or 353. Introduction to analytic techniques, legal responsibilities, and administrative procedures in evaluating environmental impacts of land use change. Practice in production of environmental impact statements and documenting scientific research.

**447 Resource Management (4)**

Prereq: 201, 241. No credit if previously taken as 327. Themes in contemporary resource management, methods of resource assessment and evaluation, and selected case studies in sustainable management of renewable resources. 4 lec, one 2-hr lab.

**455 Evolution of Planning (4)**

Prereq: 201, 350, or perm. No credit if previously taken as 435. Evolution of urban planning in U.S. during 19th and 20th centuries. Housing, parks, ideal communities, intellectual attitudes, zoning and subdivision case law, federal intervention, present programs.

**466 Remote Sensing II (5)**

Prereq: 260, 365. No credit if previously taken as 380. Synoptic interpretation and analysis of digital satellite data, infrared and radar imagery. Applications to physical geography, vegetation analysis, agriculture, natural resources, and other geographic phenomena. 3 lec, two 2-hr labs.

**468 Automated Cartography (5)**

Prereq: 260, 271, 361, or perm. No credit if previously taken as 462. Computer-aided cartography using a number of point, line, and area mapping packages. 3 lec, two 2-hr labs.

**471 Quantitative Methods (4)**

Prereq: 271. No credit if previously taken as 477. Systematic survey of methods of multivariate analysis used by geographers. Practice using statistical packages for personal computers.

**474 Analysis of Geographic Systems (4)**

Prereq: perm. Introduction to methods of systems analysis and modeling directed to study of regional, human, and environmental processes and their interaction at regional and global scales.

**475 Analysis of Geographic Systems (4)**

Prereq: 101, 121, 201, or perm. Introduction to the methods of systems analysis and modeling directed to the study of physical, human, and environmental processes and their interaction at regional and global scales.

**476 Field Methods (5-9)**

Prereq: Introduction to geographic field methods and techniques in rural and urban areas. Field mapping, data collection and record keeping, spatial sampling, interviewing, coding and visual recording, synthesis and reporting.

**478 Systems (5)**

Prereq: 260, 271. Computerized systems for collecting, storing, retrieving, transforming, and displaying spatial data. Rudiments of GIS and elementary software applications. 3 lec, two 2-hr labs.

**479 Advanced Geographic Information Systems (5)**

Prereq: 478. Directed readings and laboratory projects in the design, implementation, and application of geographic information systems in the spatial sciences. 3 lec, two 2-hr labs.

**481 Senior Seminar (2)**

Prereq: major selected topics.

**485 Internship (max 15)**

Prereq: upper division geography major. Provides qualifying students with credit for work-study experience in cartography, remote sensing, land use planning, resource management, and other fields of applied geography. Supervised by geography faculty and evaluated by on-the-job supervisor. Lengthy report culminates experience.

**486 Practicum in Cartography and Remote Sensing (2-5)**

Prereq: 360, 361, 365, 466, jr rank, geography major, and perm. Individualized undergraduate thesis-level work—theoretical or practical—in cartography and/or remote sensing.

**490 Geographic Studies (1-5, max 5)**

Prereq: perm, jr rank, max of 5 hrs. Supervised studies in fundamentals of geographic research.

**494 Field Problems (4)**

Prereq: geography major or perm. (spring) Fieldwork in Belize, involving 2-wk field trip in March followed by coursework in spring qtr. Surveying of tropical forest, savanna, and reef environments; local cultures; and archaeological sites. Research on field problem using standard geographic field methods.

## GEOLOGICAL SCIENCES

Required courses for the B.S. degree in minimum preparation for a professional career in geological sciences or entry into graduate school are 101, 256, 315, 330, 340, 350, 360, 413, 420, 421, 424, 462, 487 and at least two additional 400-level courses. The following extra-departmental courses also are required: CHEM \*121, 122, 123 OR 151, 152, 153; MATH\* 163A, 163B OR 263A, 263B, and 250B; PHYS \*201, 202 OR 251, 252, 253 (203 may be required for some graduate programs).

The major requirement for the A.B. degree includes the following: 101, 211, 256, 310, 330, 340, 350, 360, 462, and at least two additional courses at the 400 level. Extradepartmental requirements include CHEM 121 and 122, PHYS 201, and MATH 115. Students entering the A.B. program should consult with the departmental undergraduate advisor regarding appropriate minors to be combined with the A.B. degree.

The Department of Geological Sciences also offers special professional programs in the fields of water resources and environmental geology. See Special Curricula in the College of Arts and Sciences section.

A minor in geological sciences requires 101, 256, 310, and a minimum of three additional courses at the 300 or 400 level with at least one of these courses being at the 400 level.

\*Students should discuss the selection of appropriate chemistry, calculus, and physics sequences with their departmental advisor.

**101 Introduction to Geology (5)**

(2N)

Nature and distribution of earth materials and their utilization as natural resources; discussion of earth structure, earthquakes, mountain building, and continental drift; development of landscapes. 4 lec, 2 lab. Not open to students who have had 283.

**120 The Mobile Earth (4)**

(2N)

An examination of the earth's dynamic systems including continental drift, sea-floor spreading, mountain building, volcanic activity, and earthquakes, and their explanation in terms of plate tectonic theory. Intended for both science and nonscience majors seeking a nontechnical overview of plate tectonics. 4 lec.

**201 Environmental Geology (4)**

(2A)

Survey of geological aspects of environmental crisis. Focus on major environmental processes. Immediate and extended influence of humans, and prospects for future of physical environment. Presupposes no background in sciences. 4 lec.

**211 Introductory Oceanography (4)**

(2N)

Survey of physical, chemical, biological, and geological aspects of oceanography. 4 lec.

**221 Earth and Life History (4)**

(2N)

T. Worsley. A nontechnical survey exploring the 4½ billion year history of the interaction between life and the environment. Topics include the origin of the earth, the origin and development of life, the origin and evolution of the continents, the history of the atmosphere and ocean, catastrophic extinctions, and the impact of human evolution.

**231 Water and Pollution (4)**

(2A)

The interrelationship between geologic and hydrologic principles and technology as they relate to the use of water resources and the environmental problems associated with its pollution.

**256 Historical Geology (4)**

Prereq: 101. (winter) T. Worsley. Earth and life history emphasizing geologic development, stratigraphy, and fossil record of North America. 3 lec, 2 lab.

**270 World Mineral Resources (3)**

Prereq: soph rank. Major deposits of metal, nonmetallic, and fuel resources which form backbone of modern industry. Economics and basic geologic controls of mineral production reviewed. 3 lec with demonstrations. Not open to geology majors.

**283 Geology for Engineers (5)**

(fall) *D. Green*. Geologic principles applied to engineering projects and materials. 3 lec, 4 lab. Not open to students who have had 101.

**291 Selected Topics in Geology (2)**

Prereq: soph rank. 5-wk minicourses developed around specific topics in geology. **A. Earth Materials.** Characteristics of minerals and sedimentary, igneous, and metamorphic rocks. Not open to those who have had 101. **B. Glaciers and Glaciation.** Behavior of glaciers and effects of glaciation; causes of glaciation and prospects for future. **C. Geologic Development of North America.** Continental growth; character of marine invasions of North America; continental drift and mountain building. **D. Mineral Resources.** Types and origins of mineral resources; energy resources and effect on future society; current problems; energy shortages. **E. Fossils and Evolution.** Origin and development of life through geologic time. **F. Soils and Weathering.** Weathering of rocks and genetic relationship to major soil types.

**302 Research and Writing Skills (2)**

Prereq: jr rank. (winter) *R. Mapes*. Development of organizational and writing skills and guidelines for scientific report preparation including library resources, oral presentations, visual presentations, and resumes.

**305 Introduction to Air Photo and Map Interpretation (3)**

Prereq: 330, 360, or perm. (on demand) *G. Smith*. Principles of use of topographic maps and aerial photographs for study and interpretation of geologic and geomorphic features. 1 lec, 4 lab.

**310 Rocks and Minerals (6)**

Prereq: 101, CHEM 122 or 152. (winter) *G. Heten*. Principles of crystallography, descriptive and determinative mineralogy, and study of igneous, metamorphic, and sedimentary rocks designed for students in earth science education, geological science special curriculum programs, geological science minors, and related science majors. Not open to B.S. geology majors. 4 lec, 4 lab.

**315 Mineralogy (5)**

Prereq: 101, CHEM 122 or 152. (spring) *G. Heten*. Crystallography; mineralogy of nonsilicate minerals emphasizing mineral identification and formation and association of minerals in different geologic environments. 3 lec, 4 lab.

**330 Principles of Geomorphology (5)**

Prereq: 101. (spring) *G. Smith*. Basic concepts of origin and development of landforms. Lab study of topographic maps and aerial photographs. 4 lec, 2 lab.

**340 Principles of Paleontology (5)**

Prereq: 256. (fall) *R. Mapes*. Invertebrate fossils emphasizing theory of their study, morphology, classification, and biologic relationships. 3 lec, 4 lab, field trip.

**350 Stratigraphy-Sedimentology (5)**

Prereq: 256. (spring) *D. Kidder*. Introduction to principles of stratigraphy and sedimentation. Interpretation of depositional environments and their relation to plate tectonic setting. 4 lec, 2 lab.

**360 Structural Geology (5)**

Prereq: 101. (fall) *D. Nance*. Principles of rock deformation and interpretation of folding and faulting and related topics. Field-oriented structural problems, structural maps, and use of stereographic projections. 4 lec, 2 lab, field trip.

**407 Introduction to Remote Sensing (4)**

Prereq: 330, or 360, or perm. (winter) *G. Smith*. Principles of interpretation and analysis of satellite imagery in resolution of geologic problems. 2 lec, 4 lab.

**413 Silicate and Optical Mineralogy (5)**

Prereq: 315. (fall) *G. Heten*. Mineralogy of the silicate minerals; optical characteristics of minerals and identification of minerals with the petrographic microscope.

**420 Igneous Petrology/Petrography (3)**

Prereq: 413. (winter) *G. Heten*. Petrogenesis of igneous rocks and their description and classification in hand specimen and thin section. 2 lec, 2 lab.

**421 Metamorphic Petrology/Petrography (3)**

Prereq: 413. (spring) *D. Nance*. Petrogenesis of metamorphic rocks and their description and classification in hand specimen and thin section. 2 lec, 2 lab.

**424 Sedimentary Petrology/Petrography (3)**

Prereq: 350, 413. (winter) *D. Kidder*. Petrogenesis of sedimentary rocks and their description and classification in hand specimen and thin section. 2 lec, 2 lab.

**426 Principles of Geochemistry (4)**

Prereq: 315, CHEM 153. (spring) *G. Heten*. Principles of geochemistry emphasizing low temperature aqueous solutions of geologic interest, introduction to isotope geochemistry.

**432 Origin and Classification of Soils (4)**

Prereq: 330 or perm. *G. Smith*. Consideration of concept of soil and factors of soil formation; introduction to soil morphology and systems of soil classification; discussion of major soil groups of world and soils of Ohio. 3 lec, 2 lab, field work.

**438 Glacial Geology (4)**

Prereq: 330 or perm. *G. Smith*. Formation and behavior of glaciers, past and present; consideration of glacial processes; and causes and implications of ice ages. 3 lec, 2 lab, field trips.

**443 Advanced Invertebrate Paleontology (5)**

Prereq: 340. (winter) *R. Mapes*. Study of selected groups in Phylum Mollusca with details of modern biology, environmental habitats, life modes, etc. applied to fossil record. 3 lec, 4 lab.

**446 Principles of Micropaleontology (4)**

Prereq: 340 or perm. (fall) *R. Mapes*. Biology, morphology, taxonomic characteristics, and uses of microscopic fossils. 3 lec, 2 lab.

**448 Principles of Paleogeology (4)**

Prereq: 340 or perm. (fall) *R. Mapes*. Principles involved in reconstruction of paleoenvironments. 3 lec, 2 lab.

**462 Geodynamics: The Earth's Interior (4)**

Prereq: 310 or 420 or perm. (spring) *D. Green*, *D. Nance*. Solid earth geophysics (gravity, magnetism, seismicity, heat flow) and internal structure, dynamics, and evolution of Earth's core, mantle, and crust.

**464 Regional Tectonics (4)**

Prereq: 360, 462, or perm. (spring) *D. Nance*. Global tectonics and structure of continental cratons and margins, mid-ocean ridges, island arcs, and major orogenic belts. 4 lec.

**470 Economic Geology (4)**

Prereq: 315. (spring) *G. Heten*. Principles of mineral deposition and characteristics of metallic and nonmetallic mineral deposits.

**476 Subsurface Methods (4)**

Prereq: perm. (winter) *M. Ahmad*. Resume of drilling, sampling, and logging by electric, radioactivity, temperature, neutron methods as applied to petroleum exploration, water, and engineering projects. 3 lec, 2 lab.

**480 Hydrogeology I (4)**

Prereq: perm. (fall) *M. Ahmad*. Principles governing occurrence, movement, and recovery of water in soil and aquifers. Hydrologic cycle, water budget, hydrology of agriculture, watershed studies, water chemistry, and pollution. 3 lec, 2 lab.

**481 Hydrogeology II (4)**

Prereq: perm. (winter) *M. Ahmad*. Steady and unsteady flow to well, analysis of pumping test data, water well design, well development, interference of wells, design of well fields. 3 lec, 2 lab.

**482 Theory of Groundwater Motion (4)**

Prereq: 481. (spring) *M. Ahmad*. Basic principles and fundamental equations; D.E. of groundwater motion, solution of boundary value problems for different types of aquifers. Analytical and numerical methods in subsurface hydrology with emphasis on finite difference method; digital model. 4 lec.

**483 Field Hydrology (6)**

Prereq: water resources background. (summer) *M. Ahmad*. Field training in techniques of hydrology and water resources evaluation. 3 wks.

**485 Introduction to Applied Geophysics (4)**

Prereq: perm. (fall) *D. Green*. Introductory course in environmental and geotechnical geophysics. Survey of applied geophysical methods including seismic, gravity, magnetic, electrical, and electromagnetic techniques. 3 lec, 2 lab.

**487 Summer Field Geology (9)**

Prereq: 350, 360, 420, 421, 424. (5 wks, including travel time, and 1 wk report preparation, summer) *Staff*. Geologic mapping in deformed sedimentary, igneous, and metamorphic terranes. Written field report required. Course conducted in central Nevada.

**488 Geologic Field Reconnaissance (2 or 3)**

Prereq: perm. (winter) Spring vacation period geologic field trips to selected areas in eastern and central U.S. with pertinent conferences, readings, and reports.

**490 Seminar in Geology (1-2)**

Prereq: perm. Several seminars on specific topics in geological sciences will be offered yrly. It is recommended that all majors participate in at least 1 seminar.

**491 Geologic Studies (1-6, max 12)**

Prereq: perm. *Staff*. Individual or small group independent study arranged with faculty members.

## GERMAN

See Foreign Languages and Literatures.

## GERONTOLOGY

### Undergraduate Certificate

The Colleges of Arts and Sciences and Health and Human Services co-sponsor a Gerontology Certificate Program for students who desire to supplement their undergraduate curriculum with a career in working with or for the elderly. This program is open to any undergraduate student in the University. See the College of Health and Human Services section of this catalog for further details.

## GOVERNMENT

See Political Science.

## GREEK

See Foreign Languages and Literatures.

## HEALTH AND HUMAN SERVICES (HS)

**309 Microcomputer Applications in the Health Sciences (4)**

Prereq: Health and Human Services major or perm. Provides students with knowledge of and experience with microcomputer-based programs in word processing, data base management, and spreadsheet applications to solve problems often encountered in health-related areas. No credit awarded if CS 120 or MIS 100 has been taken.

**401 Introduction to Independent Living Rehabilitation (4)**

*J. Varner*. Explores historical development, philosophy, legislation, community resources, research, and professional literature which provide base of knowledge in field of independent living. Focuses on interdisciplinary cooperation in providing services in independent living. No credit awarded if HECE 250 has been taken.

**452 Home Management for the Disabled Homemaker (4)**

*J. Varner*. Recognizes unique home management demands faced by persons with disabilities and their families; determines creative methods and identifies resources to meet those demands. No credit if HECE 452 has been taken.

**453 Functional Assessment in Independent Living (3)**

*J. Varner*. Explores functional assets and limitations of persons with disabilities in completing household tasks, identifies methods and materials used in assessment of functional limitation, and determines resources and strategies to increase ability of clients to perform household tasks. No credit if HECE 453 has been taken.

**454 Clothing for Persons with Special Needs (3)**

(spring) Recognizes and evaluates various dressing techniques and functional design alternatives available to further assist independence of individuals with special needs. Focus given to populations such as elderly, physically or mentally disabled, and temporarily or permanently disabled. No credit if HETC 454 has been taken.

**499C Field Work in Home Economics: Independent Living (5-12)**

(arranged) Provides supervised, practical experience in independent living rehabilitation setting in which students will assume responsibility for partial caseload of clients under supervision of faculty member and professional in field of independent living. No credit if HECE 499C has been taken.

## HEALTH AND SPORT SCIENCES

### Athletic Training (HSAT)

**129 Introduction to Athletic Training (3)**

Principles of prevention and care of athletic injuries.

**131 Practical Aspects of Athletic Training (2)**

Prereq: 129. Introduction of practical athletic training skills with emphasis on preventive and protective techniques.

**326 Recognition/Evaluation of Athletic Injuries (3)**

Prereq: 129, ZOOL 301, or perm. Advanced techniques in management and recognition of athletic injuries.

**327 Prevention/Management of Athletic Injuries (3)**

Prereq: 129. Continuation of HSAT 326. Advanced techniques in prevention and management of athletic injuries and illnesses.

**335 Therapeutic Modalities (5)**

Prereq: PHYS 201, 202, or perm. Principles and practical skills associated with therapeutic modalities used in the treatment and rehabilitation of athletic injuries.

**350 Independent Study (4-5)**

Selected individual case studies utilizing techniques and theories in rehabilitation of athletic injuries. Additional one-hour credit for oral presentation of written analysis. Case studies completed under direction of certified HSAT Faculty.

**360 Therapeutic Exercise (5)**

Prereq: 129 or perm. Concepts and practices associated with the conditioning and reconditioning (rehabilitation) of athletic injuries.

**420 Administration of Athletic Training (3)**

Prereq: Athletic training major, sr rank. Introduction to processes necessary for implementation, maintenance, and administration of athletic training programs.

### Coeducational Activities (HSC)

These courses are for students wishing to gain competency in an activity. Courses are offered on a pass/fail basis.

**100 Archery (1)****101 Badminton (1)****102 Basic Movement (1)****103 Beginning Yoga (1)****104 Intermediate Yoga (1)****105 Boating (1)****106 Bowling (1)****107 Conditioning and Weight Training (1)**

- 108 Golf (1)
- 109 Intermediate Golf (1)
- 110 Advanced Golf (1)
- 111 Judo (1)
- 112 Intermediate Judo (1)
- 113 Karate (1)
- 114 Intermediate Karate (1)
- 115 Life Saving (1)
- 116 Beginning Tennis (1)
- 117 Intermediate Tennis (1)
- 118 Advanced Tennis (1)
- 119 Volleyball (1)
- 120 Intermediate Volleyball (1)
- 121 Social Dance (1)
- 122 Modern Dance (1)
- 123 Intermediate Modern Dance (1)
- 124 Belly Dance (1)
- 125 Intermediate Belly Dance (1)
- 126 Advanced Belly Dance (1)
- 127 Tai Chi (1)
- 128 Beginning Water Skiing (1)
- 129 Advanced Water Skiing (1)
- 130 Competitive Water Skiing (1)
- 131 Co-Educational Softball (1)
- 132 Field Sports (1)
- 133 Adapted Physical Education (1)
- 134 Aerobic Conditioning (1)
- 135 Aerobic Dance (1)
- 136 Jogging (1)
- 137 Tae Kwon Do (1)
- 138 Basic First Aid (1)
- 139 Physical Conditioning I (1)
- 140 Physical Conditioning II (1)
- 141 Physical Conditioning III (1)
- 142 Assault Prevention Women (1)
- 143 Advanced Assault Prevention Women (1)
- 144 Intermediate Racquetball (1)
- 145 Beginning Swimming (1)
- 146 Advanced Beginning Swimming (1)
- 147 Intermediate Swimming (1)
- 148 Advanced Swimming (1)
- 149 Beginning Diving (1)
- 150 Intermediate Diving (1)
- 151 Swim Workouts (1)
- 152 Aqua Aerobics (1)
- 153 Synchronized Swimming (1)
- 154 Intermediate Synchronized Swimming (1)
- 155 Water Polo (1)
- 156 Scuba (1)
- 157 Intermediate Tae Kwon Do
- 159 Circuit Fitness
- 160 Beginning Skating (1)
- 161 Intermediate Skating (1)
- 162 Figure Skating (1)
- 163 Advanced Figure Skating (1)
- 164 Power Skating

- 165 Speed Skating (1)
- 166 Precision Skating (1)
- 167 Hockey (1)
- 168 Beginning Snow Skiing (1)
- 169 Intermediate Snow Skiing (1)
- 170 Beginning Horseback Riding — Western I (1)
- 171 Beginning Horseback Riding — Western II (1)
- 172 Intermediate Horseback Riding — Western I (1)
- 173 Intermediate Horseback Riding — Western II (1)
- 174 Beginning Hunt Seat I (1)
- 175 Beginning Hunt Seat II (1)
- 176 Intermediate Hunt Seat I (1)
- 177 Intermediate Hunt Seat II (1)
- 178 Beginning Horseback Jumping (1)
- 179 Intermediate Horseback Jumping (1)
- 180 Trail Riding (1)

## Environmental Health (EH)

### 260 Introduction to Environmental Health and Safety (4)

Prereq: soph rank. Survey of technical and administrative procedures needed to control the environment, especially as they relate to health effects encountered in daily activities. Emphasis on general ecological environmental protection, environmental degradation, along with safety concepts, practices, and procedures.

### 310 Water Supply and Wastewater Environmental Health Practice (4)

Prereq: 260, CHEM 123, GEOL 231, or perm. Examination of processes for the development of water resources, quantity and quality requirements, preventive control measures and treatment, collection of waste waters, and treatment for disposal or reuse. Health implications of water quality management will be stressed.

### 312 Solid and Hazardous Waste Management (4)

Prereq: 260 or perm. Problems and solutions to the storage, collection, and disposal of hazardous and nonhazardous wastes with special emphasis on the planning and management aspects of designing, organizing, and operating refuse collection and disposal systems.

### 320 Shelter Environments (4)

Prereq: 260 or perm. Physiological and psychological aspects of exterior and interior environmental concerns. Emphasis on housing standards, building codes, vector control, separate concerns of urban and rural housing, migrant labor housing, mobile home construction, and mobile home park design.

### 330 Food Quality Control (4)

Prereq: 260, MICR 211/212 or perm. Emphasizes the topics of foodborne diseases and regulatory programs relative to sanitary inspection and control of food service and processing systems.

### 430 Vector Control and Pesticide Use (4)

Prereq: 260 or perm. Vectors responsible for rodent and anthropod-borne diseases of medical and veterinary importance with special emphasis on human health and welfare implications.

### 440 Air Quality and Pollution Control (4)

Prereq: 260, CHEM 123, or perm. Evaluating and monitoring air quality; effects of pollution control and lab procedures in air quality investigation. Special emphasis on air pollution's effects on human health and welfare.

### 450 Institutional Environmental Health Practice (4)

260 or perm. Emphasis on the institutional aspects of shelter as they relate to disease prevention and control within hospitals, nursing homes, day care centers, schools, and correctional facilities.

### 455 Recreational Environmental Health Practice (4)

260 or perm. Broad view of all major aspects that should be considered in the planning, development, and operation of recreational environments as they relate to proper environmental health protection.

**457 Environmental Health Planning and Program Administration (4)**

Prereq: 260 or perm. Designed to allow the student to gain knowledge and understanding of the various processes involved in the development and operations of environmental health programs. Particular attention paid to the implementation, maintenance, and evaluation of regulatory programs, with emphasis on project management and planning.

**464 Environmental Health Practicum (15)**

Prereq: sr, perm, and major. Supervised learning experience in an approved clinical/environmental health facility designed to provide the student with practical comprehensive opportunities in environmental health to enhance and complement required classes.

**490 Independent Study in Environmental Health (1-5)**

Prereq: major and perm. Research in selected areas of environmental health.

## Health Sciences (HLTH)

**101 Introduction to Health and Human Services Professions (3)**

Prereq: freshman only or perm. Taught by team of faculty and practicing professionals, course examines various roles of health care professionals in health care delivery system, describes education and training program options, and explores opportunities for employment.

**202 Health Sciences and Lifestyle Choices (4) (2A)**

Practices and appreciation of means whereby health of individual and group may be maintained.

**204 Drugs, Alcohol, and Tobacco Education (3)**

Presents basic pharmacology and toxicology of common drugs, alcohol, and tobacco and consequences of their abuse.

**227 First Aid (3)**

Presents the knowledge and skills of the American Red Cross Standard First Aid course including adult CPR. Certification granted upon successful completion.

**228 Cardiopulmonary Resuscitation (1)**

Presents the knowledge and skills of the American Red Cross Community CPR course, including instruction in adult, infant, and child skills. Certification granted upon successful completion.

**301 Introduction to Health Care Organizations (4)**

Focuses on U.S. health system, describing health care institutions, providers, payment practices, and significant health legislation. Discusses trends and future perspectives against historical background. Assists manager to develop panoramic view of health care organizations.

**302 Long-Term Care Administration I (4)**

Presents laws, regulations, and standards that impact long-term care facilities management. Discusses client rights and responsibilities and their implications in managing such facilities. Stresses ethical and moral issues confronting manager. Reviews risk management and strategies for providing safe and comfortable environment.

**303 Long-Term Care Administration II (4)**

Prereq: 302. Presents managerial ideologies important to manager of long-term care facilities. Fully develops role of administrator in planning, organizing, directing, controlling, and staffing for specific services of long-term care facilities within holistic framework for client care. Studies professional relationships and coordinating function of manager. Includes contributions of rehabilitation and recreation services to long-term care.

**327 Instructor's First Aid (3)**

Prereq: current ARC-SFA Certification or 227. Presents all necessary information to conduct and implement an American Red Cross Standard First Aid course. Instructor certification granted upon successful completion.

**328 CPR Instructor (2)**

Prereq: current ARC-Community CPR Certification or 228. Presents all necessary information to conduct and implement an American Red Cross Community CPR course. Instructor certification granted upon successful completion.

**350 Independent Study (1-5)**

Study and/or research in selected topics of interest to students in health sciences.

**364 Community Health Field Experience (1-5)**

Prereq: jr rank, 390, or perm. Observation and participation in activities of community health agency or medical facility or program. Students must apply for placement during preregistration.

**370J Writing for Health Sciences (4)**

(1J)

Prereq: jr rank. This course is designed to improve the writing skills of students and provide a foundation for understanding community health problems.

**379 Teaching of Health (5)**

Prereq: 202; jr rank. Instruction, principles, and curricula used in presenting health information to pupils in elementary and secondary schools.

**390 Community Health (4)**

Prereq: 202 or perm. Institutional frameworks for promoting and maintaining health of people of community, state, and nation.

**402 Contemporary Problems in Health Care Organizations (4)**

Prereq: perm, sr rank. Identifies societal forces which are prescribing new role definitions and new skills for health manager. Explores selected issues confronting modern health care administrator and management strategies effective in resolving these and related problems. Examines research studies underway in health care organizations. 2 lec, 2 lab.

**403 Long-Term Care Administration III (4)**

Prereq: perm, sr rank. Deals with administrative processes in long-term care management. Orients student to modern information systems and use of data in managing decision action and record keeping. Presents content on building effective public relations, managing volunteer programs, and in supporting client governance. Prepares student to sit for licensure exams.

**413 Health Aspects of Aging (3)**

Prereq: 202 or perm. Theories of aging involving changes in structure and performance presented. Emphasis on normal aging changes, mental health, health promotion, and community health.

**419 Health Education for the Elementary School (4)**

Prereq: 202 or perm. Application of principles of curriculum development, identification of appropriate concepts and practices, and use of teaching methods and resources at elementary school level.

**421 Financial Administration of Health Care Facilities (4)**

Prereq: ACCT 201, sr rank, or perm. Emphasis on the interpretation and application of accounting and financial concepts in health services with an introduction to strategic financial planning.

**422 Reimbursement Payment Systems in Health Care Organizations (4)**

Prereq: sr rank or perm. Analysis of reimbursement systems for acute care, long term care, home care, and alternative care systems. Both current and projected systems will be examined.

**423 Administration of Acute Care Facilities (4)**

Prereq: sr rank or perm. Focuses on the understanding, skill, and ethical issues important to the management, organization, planning, financing, and evaluation of an acute health care facility and its services to patients. Emphasis on the administrator's role in an acute health care facility.

**425 Controlling Stress and Tension (2)**

Prereq: 202 or perm. Holistic approach to stress management covering recognition of tension, physiological response, relaxation techniques, and individual stress profile.

**427 Health of Women (4)**

Prereq: jr rank. The health needs and concerns of women within the physical, mental-emotional, and social dimensions of functioning are examined. Emphasis on women as health care and product consumers is provided.

**430 Worksite Health Promotion (4)**

Examination of worksite health promotion programs. Guidelines for development of health promotion programs in corporate settings discussed.

**464 Community Health Services Practicum (15)**

Prereq: sr rank. Participation in activities of official or voluntary public health agency. Supervision of experience to be done by agency personnel and University faculty.

**480 Practicum in Health Services Administration I (10)**

Prereq: all coursework completed; perm. Focuses on skill-building experiences in general administration critical to overall management of long-term care facility and its relationship to community.

**481 Practicum in Health Services Administration II (15)**

Prereq: perm. Focuses on comprehensive skill-building experiences in managing client-care programs and services. Develops competencies in applying holistic concept of care to selected groups of clients. Provides opportunities to work with and through professional health care team in attaining quality client care.

**490 Independent Study (1-5)**

Prereq: perm. Allows for special study of topics of interest to students studying long-term care management.

**491A-F Special Topics Workshops (1-3)**

Prereq: matriculation in Ohio University, perm. (A) Focuses on administrative practices and issues; (B) focuses on environmental health and safety; (C) focuses on legal aspects; (D) focuses on client-centered care programs; (E) focuses on team-building and interpersonal relationship skills; (F) focuses on intercommunity relationships and consortia arrangements.

**495 School Health Problems (5)**

Prereq: 379 and sr rank. Principles, problems, organization, and administration of school health programs, including health services, healthful school environment, health instruction, and school and community relationships.

**Industrial Hygiene (IH)**

Students interested in the program should consult the coordinator, Industrial Hygiene Program, School of Health and Sport Sciences, for advising and schedule planning.

**200 Introduction to Industrial Hygiene and Occupational Safety and Health (4)**

Prereq: industrial hygiene major or perm. (fall) Introduction to occupational safety and health and industrial hygiene including historical developments, health and safety program concepts, social and legislative requirements, professional relationships, and general introduction to concepts of recognition, evaluation, and control of exposures.

**400 Industrial Hygiene Sampling and Analysis (5)**

Prereq: jr rank in industrial hygiene or perm. (winter) Lectures and lab to introduce field sampling and lab instrumentation and analytical methods common to industrial hygiene. Students required to interpret readings, analyze samples, and prepare appropriate reports.

**401 Hazardous Materials in the Workplace (4)**

Prereq: sr rank in industrial hygiene or perm. (spring) Lectures on gases, vapors, dusts, liquids, and solids and their physical and chemical characteristics; Emphasis on sampling, evaluation, and control methods. Technical reports required, including design requirements as specified by regulatory agencies.

**405 Ventilation for Contaminant Control (4)**

Prereq: 401 or perm. (fall) Designed to impart a working knowledge of the principles, methods, and practices of controlling worker exposure to hazardous concentrations of air contaminants and to present logical methods of design, evaluation, and maintenance of such systems.

**410 Physical Hazards: Evaluation and Control (4)**

Prereq: 400 or perm. (winter) Designed to provide a functional knowledge of methods used to evaluate and control noise, vibration, heat, light, and other factors affecting the health and well-being of the worker.

**415 Introduction to Radiological Health: Evaluation and Control (5)**

Prereq: 400 or perm. (spring) Introduction and overview of health effects of various sources of radiation including sources, evaluation, safety, and control factors.

**420 Hazardous Material: Management and Control (4)**

Prereq: 401 or perm. (fall) Lectures on gases, vapors, dusts, liquids, and solids and their physical and chemical properties. Emphasis is

upon evaluation and control methods. Student is required to develop controls for specific cases and present them in technical reports.

**Men's Activities (HSM)**

These courses are for students wishing to gain competency in an activity. Courses are offered on a pass/fail basis.

**101 Basketball (1)****102 Conditioning and Weight Training (1)****104 Gymnastics (1)****105 Handball (1)****107 Swimming (1)****108 Intermediate Swimming (1)****109 Ice Hockey Fundamentals (1)****110 Lacrosse (1)****111 Softball (1)****112 Racquetball (1)****113 Intermediate Handball (1)****115 Intermediate Racquetball (1)****116 Broomball (1)****Physical Education and Sport Sciences (HPES)****103 Beginning Swimming (2)**

Basic swimming skills for nonswimmers.

**104 Intermediate Swimming (2)**

Prereq: 103 or equiv. Instruction in basic strokes and related aquatic skills at intermediate and advanced level.

**105 Conditioning for Activity and Organic Efficiency (2)**

Prereq: physical education major. To increase fitness level and knowledge competency of students majoring in physical education.

**106 Introduction to Human Movement (2)**

Prereq: physical education major. Introduces student to discipline of human movement and to profession of teaching within discipline. Students begin to develop movement analysis techniques, and learn fundamental of self and other analyses in movement.

**107 Modern Dance I (2)**

Prereq: physical education major or minor or perm. Basic principles of dance technique. Movement progressions involving relationships of time, space, and dynamics.

**108 Modern Dance II (2)**

Prereq: 107 or equiv. Complex movement progressions, and experimentation in composition.

**109 Synchronized Swimming (2)**

Prereq: 104 or equiv. Focuses on basic principles of 104. Development of simple stunts, sculling, and modified strokes; experimentation in group and individual composition.

**115 Rhythmics (2)**

Prereq: physical education major or minor or perm. Practical approach to rhythm fundamentals through various dance forms.

**116 Social Forms of Dance (2)**

Prereq: 115 or perm. Intermediate skills in ballroom, folk, round, mixers, couple, and contra dance.

**117 Folk and Square Dance (2)**

Prereq: 115 or perm. Introduces folk and square dance skills, and allows students majoring in physical education to develop competency in this area of dance.

**134 Introductory Field Experience in Physical Education (2)**

Designed to assist in career decisions. Seminar component prepares for field experience and practicum component aids in career decision making.



**141A Archery (1)**

Prereq: physical education major or minor or perm. Increases archery skill and knowledge competency of students majoring in physical education.

**141B Golf (1)**

Prereq: physical education major or minor or perm. Increases golf skill and knowledge competency of students majoring in physical education.

**212 Introduction to Coaching (3)**

Prereq: soph. Introduction to high school interscholastic athletics including history, structures, job opportunity, and contemporary programs.

**213 Youth and Sports (3)**

Covers opportunities, controversies, organizations, safety, values, rules, leadership, benefits, and settings of youth sports programs.

**215 Practicum in Athletics (2)**

Prereq: 212 or perm. Supervised field experience designed to involve student in coaching/administrative setting.

**218 Life Guard Training (2)**

Prereq: HLTH 227 (First Aid) and HLTH 228 (CPR) certification or concurrently. Principles and practices of life saving for American Red Cross certification.

**220 Water Safety for Instructors (3)**

Prereq: current Lifeguard Training certificate. For those who hold valid American Red Cross Life Saving certificate. Includes analysis of swimming, life saving techniques, and teaching practices.

**221A Tennis (1)**

Prereq: physical education major or minor or perm. Increases tennis skill and knowledge competency of students majoring in physical education.

**221B Badminton (1)**

Prereq: physical education major or minor or perm. Increases badminton skill and knowledge competency of students majoring in physical education.

**222 Tumbling and Modern Gymnastics (2)**

Prereq: physical education major or minor or perm. Stunts, tumbling, and modern gymnastics.

**223 Track and Field (2)**

Prereq: physical education major or minor or perm. Track and field activities.

**224A Racquetball (1)**

Prereq: physical education major or minor or perm. Increases racquetball skill and knowledge competency of students majoring in physical education.

**224B Wrestling (1)**

Prereq: physical education major or minor or perm. Familiarizes physical education major with skills and knowledge necessary for successful teaching of wrestling. Adding this course as elective to physical education curriculum will widen their scope and better prepare physical educators in teaching field.

**225 Gymnastics—Men and Women (2)**

Prereq: 222 or perm. Women: floor exercise, balance beam, vaulting, and uneven parallel bars; men: horizontal bars, giant swing, floor exercise, and vaulting.

**234 Clinical and Field-Based Experiences in Physical Education (1-4)**

Prereq: soph rank; 134, 273 or 274 or 275, or perm. Supervised practice in organizing, managing, and teaching physical education activities to public-school-age children in public school and clinical settings. May be repeated in excess of 4 hrs credit with approval.

**260A Flag Football (1)**

Prereq: physical education major or minor or perm. Increases flag football competency of students majoring in physical education.

**260B Team Handball (1)**

Prereq: physical education major or minor or perm. Increases team handball competency of students majoring in physical education.

**261 Practicum in Sport Sciences (1)**

Prereq: sport science major. Lab and field experiences designed to place students in various settings related to their program emphasis.

**262A Field Hockey (1)**

Prereq: physical education major or minor or perm. Focuses on producing performance competency in skills, with knowledge of rules of activities involved and with ability to apply strategies in games. Team play valued as cooperative project.

**262B Soccer (1)**

Prereq: physical education major or minor or perm. Focuses on producing performance competency in skills, with knowledge of rules of activities involved and with ability to apply strategies in games. Team play valued as cooperative project.

**263A Basketball (1)**

Prereq: physical education major or minor or perm. Increases basketball skill and knowledge competency of students majoring in physical education.

**263B Volleyball (1)**

Prereq: physical education major or minor or perm. Increases volleyball skill and knowledge competency of students majoring in physical education.

**264A Softball (1)**

Prereq: physical education, major or minor or perm. Focuses on developing student competency in softball skills, with understanding of strategy in activities and knowledge of official rules and their application.

**264B Lacrosse (1)**

Prereq: physical education major or minor or perm. Develops student competence in lacrosse with understanding of strategy in activities and knowledge of official rules and their application.

**265 Diving and Competitive Swimming (2)**

Prereq: 104 or equiv. Familiarizes student with mechanics and performance skills of competitive swimming and diving. Adding this course as elective to aquatics specialization will widen scope and better prepare physical educators with aquatics interest.

**270 Teaching of Physical Education (3)**

Prereq: elem ed majors. Lab and lecture experiences for teaching physical education in elementary school.

**273 Movement Education and Fundamental Skills (3)**

Prereq: physical education major or minor. Theory, teaching methods, techniques, and materials in elementary school physical education with emphasis on basic movement education for levels K-3.

**274 Sport and Game Skills for Elementary School Children (3)**

Theory, techniques, and materials for elementary school physical education program with emphasis on lead-up activities, creative game analysis, and sport and recreational skills for levels 4-6.

**275 Elementary School Rhythms and Dance (3)**

Rhythmics and dance activities for elementary level, involving movement exploration, creative dance, and traditional dance.

**290 Teaching Aerobic Exercise and Dance (4)**

Introduces students to area of aerobic dance/exercise, its history, characteristics, and related information necessary to development of a technically sound program.

**302 Biomechanics (4)**

Prereq: ZOOL 301. Analysis of human movement based on anatomical and mechanical principles.

**305 Coaching of Swimming (2)**

Prereq: 212 or perm. Theory of coaching swimming and diving; analysis of skills, methods, duties, and responsibilities.

**314 Coaching Sports for the Disabled (2)**

Prereq: jr rank and perm. Examines scope of coaching techniques, training programs, and principles of competitive sports for disabled people.

**318 Coaching of Tennis (3)**

Prereq: 212 or perm. Theory of coaching tennis: analysis of skills, strategies, methods, duties, and responsibilities. Limited practical work.

**319 Analysis of Current Research in Physical and Motor Development of Athletes (3)**

Prereq: 212 or perm. Physiological, anatomical, and kinesiological research finding which maximizes motor performance and minimizes injury. Special emphasis on utilization of research in competitive sports.

**320 Coaching of Wrestling (3)**

Prereq: 212 or perm. Theory of coaching wrestling: analysis of skills, strategies, methods, duties, and responsibilities.

**324 Coaching of Soccer (3)**

Prereq: 212 or perm. Theory of coaching soccer: analysis of skills, strategies, methods, duties, and responsibilities.

**325 Human Dynamics in Coaching (3)**

Prereq: 212 or perm. Interpersonal dimensions of coaching and participating in interscholastic athletic program.

**333 Theory of Adapted Activities (3)**

Prereq: 234, 273 or 274 or 275, or perm. Organization of physical activity programs adapted to needs of atypical individuals.

**334 Clinical and Field-Based Experiences in Physical Education (1-4)**

Prereq: jr rank; 134, 273 or 274, or 275 or perm. Supervised practice in organizing, managing, and teaching physical education activities to children in public schools and in clinical settings. May be repeated in excess of 4 hrs credit with approval.

**335 Adapted Physical Education for the Special Educator (3)**

Prereq: EDSP 160, 271. Designed to offer insight and practical experience in the areas of motor deficiencies of children. Provides for the acquisition of observation skills, motor analysis skills, motor progressions, and the process of adapting skills, activities, and equipment to the motor needs of handicapped children.

**337 Dance Composition (2)**

Prereq: 108 or equiv. Basic principles of composition, presentation, and choreography.

**339 Athletic Officiating — Football (3)**

(fall) Rules, mechanics, and procedures in officiating. Practice under actual game conditions in Intramural Sports Program.

**340 Athletic Officiating — Basketball (3)**

(winter) Rules, mechanics, and procedures in officiating. Practice under actual game conditions in Intramural Sports Program.

**341 Athletic Officiating — Baseball (3)**

(spring) Rules, mechanics, and procedures in umpiring. Practice under actual game conditions in Intramural Sports Program.

**342 Sports Officiating III (1)**

(spring) USWLA rules and procedures in officiating lacrosse; or USFHA and Federation rules and procedures in officiating field hockey. Fee required for those taking local, state, or national rating examination.

**345 Introduction to Exercise Physiology (4)**

Prereq: 105, ZOOL 301. Introduces the basic physiological principles of organ systems and body function during exercise. Special emphasis on the function of the nervous, muscular, cardiovascular, and respiratory systems and how they respond to exercise and exercise conditioning. Application of these principles in examining the optimal means to promote health-related fitness and optimal athletic performance.

**350 Independent Study (1-5)**

Prereq: perm. Study and/or research in selected fields related to health, physical education, athletics, intramurals, or recreation under direction of HPES undergraduate committee and faculty member.

**351 Coaching of Golf (2)**

Prereq: 212 or perm. Theory of coaching golf: analysis of skills, methods, duties, and responsibilities.

**352 Coaching of Ice Hockey (3)**

Prereq: 212 or perm. Theory of coaching ice hockey: analysis of skills, strategies, methods, duties, and responsibilities.

**353 Coaching of Lacrosse (3)**

Prereq: 212 or perm. Theory of coaching men's and women's lacrosse: analysis of skills, strategies, methods, duties, and responsibilities.

**354 Coaching of Volleyball (3)**

Prereq: 212 or perm. Theory of coaching volleyball: analysis of skills, strategies, methods, duties, and responsibilities.

**356 Coaching of Field Hockey (3)**

Prereq: 212 or perm. Theory of coaching field hockey: analysis of skills, strategies, methods, duties, and responsibilities.

**365 Coaching of Basketball (3)**

Prereq: 212 or perm. Theory of coaching basketball: analysis of skills, strategies, methods, duties, and responsibilities.

**366A Coaching of Baseball (3)**

Prereq: 212 or perm. Theory of coaching baseball: analysis of skills, strategies, methods, duties, and responsibilities.

**366B Coaching of Softball (3)**

Prereq: 212 or perm. Theory of coaching softball: analysis of skills, strategies, methods, duties, and responsibilities.

**367 Coaching of Football (3)**

Prereq: 212 or perm. Theory of coaching football: analysis of skills, strategies, methods, duties, and responsibilities.

**368 Coaching of Track (3)**

Prereq: 212 or perm. Theory of coaching track: analysis of skills, strategies, methods, duties, and responsibilities.

**372 Theory and Practice of Sports (3)**

Prereq: 2 credits each in individual and team sports. Analysis and teaching progression of individual sport skills. Organizational techniques and practices. Lesson and unit planning.

**373 Adapted Aquatics (3)**

Prereq: 220 or perm. Analysis and teaching progression of aquatic skills and related activities. Organizational techniques and practices. Lesson and unit planning.

**374 Theory and Practice in Rhythmic Activities (3)**

Prereq: 107 or 108, and 116, intermediate modern dance skill recommended. Teaching progression and materials for rhythmic programs on secondary level. Lesson and unit planning.

**375 Theory and Practice of Women's Gymnastics (3)**

Prereq: 222 and 225. Materials, techniques, and practice of artistic and rhythmic gymnastics. Lesson and unit planning.

**377 Theory and Practice of Elementary Physical Education (3)**

Prereq: 273, 274, 275. Study of scope and sequence of elementary physical education program (K-8), development of understanding for interrelationship of curriculum, unit, and lesson planning, and refinement of teaching skills unique to teaching elementary physical education.

**380 Life Guard Training (2)**

Prereq: current Lifeguard Training certification. Focuses on the responsibilities of the lifeguard, lifeguard conduct, preventative lifeguarding, emergency plans for all types of facilities, and health and sanitation.

**390 Safety Education (4)**

Prereq: none. Preparation for assuming responsibility for programs of safety education and accident prevention in schools, industry, and public services.

**400 Women in Sports (3)**

Examines the role of play, sports, and games in life of women. Explores place of women in sports world, and reflects on special attitudes and structures of women's sports.

**402 Learning Strategies in Physical Education (3)**

Prereq: 372, 377. Discussion and application of selected methods and techniques used in teaching of physical education.

**404 History and Principles of Physical Education (4)**

Prereq: jr or sr rank. History of sport and physical education from ancient to modern times. Principles underlying physical education in modern program of education.

**405 Motor Learning (4)**

Prereq: jr rank. Consideration of psychological, sociological, and physiological bases of learning and application of these theories to performance.

**406 Organization and Administration of Physical Education (4)**

Prereq: jr or sr rank. Organization and administration of physical education, intramural, and athletic programs in elementary and secondary schools.

**408 The Black Athlete and American Sport (3)**

Prereq: jr or sr rank or perm. Explores origins of black athlete's participation in American sport and examines role of black men and women in growth of American sport and physical activity during 19th and 20th centuries.

**409 Tests and Measurements (4)**

Prereq: major or minor, jr or sr rank. Administration and evaluation of tests in health, physical education, and athletics; practice in handling test data by elementary statistical methods.

**411 The Olympic Movement (3)**

Prereq: jr or sr rank or perm. Study of origin and development of games from Greek era to modern period. Meaning of Olympism in relation to contemporary summer and winter Olympiads explored.

**412 Administration of Sports (3)**

Prereq: 212 or perm. Focuses upon legal questions, public relations, ethics, budgeting, recruiting, crowd control, evaluation, and personnel.

**414 Physiology of Exercise (4)**

Prereq: ZOOL 345, with 415 concurrent. Fundamental concepts describing reaction of organ systems to exercise; study of work produced by muscle; special areas include sport conditioning, muscular fatigue, physiology and nutrition in exercise, weight control and exercise; physical fitness; exercise and environmental stresses; review of recent research in exercise physiology and human performance.

**415 Physiology Exercise Lab (3)**

Prereq: ZOOL 345, with 414 concurrent.

**417 Exercise Prescription (4)**

Prereq: 414, 415, or perm. Application of anatomy, physiology, and exercise physiology in the evaluation of physical fitness of both normal and special populations. Importance of test results in relation to disease conditions and in writing appropriate exercise prescriptions to promote a healthy life style or provide rehabilitation from previous health problems.

**434 Clinical and Field-Based Experiences in Physical Education (1-4)**

Prereq: sr rank; 134, 273 or 274, or 275 or perm. Supervised practice in organizing, managing, and teaching physical education activities to public-school-age children in public school and clinical settings. May be repeated in excess of 4 hrs credit with approval.

**455 Administration of Aquatic Facilities (3)**

(spring) Prepares students to supervise a facility and provides background for the mechanical functions of a pool and the organization of a total aquatic program.

**480 Teaching Adapted Physical Education: Analysis and Description (3)**

Prereq: 234, 333. Methods and materials of teaching-learning process for physical education classroom.

**485 Perceptual Motor Development in Children (3)**

Prereq: 106 and 405, or perm. Principles and practices in perceptual-motor development as they relate to children's movement experiences.

## Recreation Studies (HREC)

**101 Orienteering (1)****102 Advanced Orienteering (1)****103 Survival I (1)****104 Survival II (1)****105 Whitewater Rafting (1)****106 Hunting (1)****107 Trapshooting (1)****108 Technical Climbing and Rapelling (1)****109 Advanced Survival (1)****111 Cross Country Skiing (1)****112 Backpacking (1)****113 Canoeing (1)****114 Kayaking (1)****115 Ropes (1)****116 Rescue Techniques (1)****117 Primitive Construction (1)****199 Introduction to Therapeutic Recreation Services (3)**

Factors presented will serve as foundation for career or employment in therapeutic services in both public and private settings for disabled, delinquent, and disadvantaged.

**200 Introduction to Leisure (2)**

Provides student with broad understanding of nature and scope of leisure behavior and resources on which they can build their subsequent specializations.

**214 Camping for Special Populations (2)**

Prereq: 199. Develops and teaches implementation of camping activities for special populations with emphasis on strengths and weaknesses of individual camper.

**236 Field Experience in Recreation (1-3)**

Prereq: soph, recreation major/minor. Designed to provide soph recreation student with opportunity to acquire supervised experiences in skills and techniques involved in differing areas of recreation.

**240 Taxidermy I (2)**

Prereq: soph rank. Study and practice of methods used to produce specimens that are exact replicas of living animals. Emphasis on birds.

**241 Taxidermy II (2)**

Prereq: 240. Continuation of 240, with major emphasis on game animals and fish.

**250 Recreation Leadership (3)**

Prereq: soph rank. Lectures and discussions concerning value of recreation, leadership techniques, and selection of activities.

**251 Art and Nature Crafts for Recreational Programs (3)**

Prereq: recreation major/minor or perm. Organization of art and nature crafts program and actual experiences in use of various craft materials with particular emphasis on nature crafts.

**290 Recreational Sport Officiating (3)**

Prereq: soph rank. Provides meaningful, educational experience of practical nature in area of sport officiating.

**291 Outdoor Pursuits (3)**

Provides student with basic skills and knowledges to teach selected outdoor activities.

**310 Program Planning and Facilities for Recreation (5)**

Prereq: recreation major/minor or perm. Concepts and fundamentals of recreation programs, program planning and care, selection, and design of recreation facilities.

**311 Expedition Management (3)**

Prereq: jr or perm. Will assist student in planning and competently leading wilderness camping expedition. Will acquaint student with all aspects of expedition leadership. Student will develop and lead expedition in competent, safe manner.

**314 Camping (4)**

Prereq: recreation major/minor or perm. Introduction to and experiences in different methods of camping and various skills associated with camping.

**315 Outdoor Education and Recreation (4)**

Prereq: recreation major/minor or perm. Designed to provide student with fundamental knowledges necessary to provide learning experiences in out-of-doors and for teaching necessary skills for outdoor living enjoyment.

**336 Field Experiences in Recreation (3)**

Designed to provide jr recreation student with opportunity to acquire experience in skills and techniques involved in differing areas of recreation.

**345 Camp Leadership (2)**

Responsibilities of camp personnel at executive, administrative, supervisory, and functional levels. Includes different types of organized camps and their individual programs.

**370J Writing for Recreation Studies (4)**

(1J)

Allows the student to practice the writing process while investigating current issues and trends in the recreation and leisure field. This course is designed to meet the junior-level composition requirements.

**376 Principles and Practices of Therapeutic Recreation (3)**

Prereq: recreation major/minor or perm. Study of therapeutic recreation service, principles, and practices in various types of institutions.

**377 Administration of Activities for Therapeutic Recreation (3)**  
Assessment and analysis of leisure time activities for handicapped with emphasis on contributions these activities can make in rehabilitation of those special populations.

**381 Administration of Recreational Sports (4)**

Prereq: soph rank. Organizing and administering a program of intramural sports for all age levels.

**390 Wilderness Survival (3)**

Provides student with basic skills and knowledges to survive in wilderness situation, to cope with wilderness emergencies, and to teach wilderness survival.

**403 History of Recreation (3)**

Prereq: recreation major/minor or perm. Study of historical development of recreation from early worlds to present. Emphasis on contribution of recreation and its effect on humans throughout history and its impact and implication for humankind's use of leisure time in present-day society.

**430 Principles of Therapeutic Recreation for the Mentally Retarded (3)**

Preparation for presenting activities and evaluating mentally retarded and learning disabled children and youths in areas of body mechanics, physical fitness, games of low organization, sports, rhythms, stunts, tumbling, and recreation activities.

**440 Internship in Recreation (16)**

Prereq: recreation major/minor and perm. Supervised professional field work experiences in approved program of recreation.

**449 Administration of Recreation (4)**

Prereq: jr rank. Programs and program building; administration of playgrounds, community centers, and recreational activities.

**460 Understanding Play (3)**

Study of selected play theory for purpose of developing recreation therapy programs.

**470 Program Planning for the Handicapped and Confined (3)**

Prereq: 199 or EDSP 271. Designed to prepare students to assess handicapping conditions; to determine consequences of these conditions; and to direct and plan therapeutic activities which contribute to disabled person's maximum recreational functioning.

**475 Adventure Programming (3)**

Prepares student to plan, organize, and conduct outdoor adventure activities.

**Women's Activities (HSW)**

These courses are for students wishing to gain competency in an activity. Courses are offered on a credit/fail basis.

**103 Basic Movement (1)****104 Basketball (1)****105 Conditioning and Weight Training (1)****106 Gymnastics (1)****108 Swimming (1)****109 Intermediate Swimming (1)****110 Lacrosse (1)****111 Softball (1)****112 Racquetball (1)****116 Broomball (1)****142 Women's Self Defense (1)****HEARING AND SPEECH SCIENCES**

The curriculum in hearing and speech sciences is designed to give the student a basic understanding of the causes and treatment of various speech, language, and hearing disorders. A student wishing to pursue certification as a speech therapist in Ohio's schools takes additional coursework in education, but completion of that certificate cannot occur at the undergraduate level. Students must be admitted to graduate school to complete all requirements for Ohio certification, including student teaching.

**107 Voice and Articulation (2)**

Designed to help each student recognize, evaluate, and compensate for or improve speech production characteristics.

**108 Introduction to Speech Disorders (5) (2A)**

Symptoms, causes, effects, and evaluation of disorders of speech, voice, and language.

**207 English Pronunciation - International Students (2)**

Prereq: successful completion of OPIE or comparable proficiency in English. Group and individual instruction and pronunciation of sounds, rhythm, and stress patterns of English for international students and nonnative speakers of English.

**209 Phonetics (4)**

(fall, spring) Speech sounds from sociological and physiological point of view. Mastery of International Phonetic Alphabet and English phonetic transcription.

**213 Anatomy and Neurology of Speech (4)**

(fall, winter) Structures, musculature, and functions involved in respiration, phonation, resonance, and articulation for speech.

**240 Professional Orientation (2)**

Prereq: HSS major. (fall, spring) Introduction to therapy training through lectures and videotapes of diagnosis, therapy, and various areas of profession. 2 class meetings per wk.

**250 Speech and Hearing Science (4)**

(winter, spring) Physical properties of speech signals. Analysis of speech and speech perception. Lab exercises and experiments included.

**279 Basic Manual Communication (3)**

Prereq: HSS major or perm. (fall, winter) Basic instruction and practice in fingerspelling and signing used by and for deaf and hard of hearing.

**300 Communication Disorders of the Elderly: Assessment and Rehabilitation (3)**

(spring) Basic information concerning nature of minor and major communication disorders in older adults, communication aids, and alternate approaches to rehabilitation.

**310 Language Development (5)**

Prereq: 209. (fall) Provides foundation in normal speech and language development. Development of meaning, symbolic representation, morphology, and syntax.

**318 Articulation Disorders (4)**

Prereq: HSS majors only; 209. (fall) Phonetic acquisition, articulation evaluation. Emphasis on practical approaches to therapy for individuals with articulation disorders.

**320 Disorders of Phonation and Fluency (3)**

Prereq: 213. (winter) Instruction in basic etiological considerations of disorders affecting vocal mechanism, as well as diagnostic and therapeutic considerations. Also, discussion of fluency disorders including etiologies, evaluation, and rehabilitation planning.

**336 Speech and Hearing Disorders in the Public Schools (3-4)**

Nature, causes, and treatment of defective speech in public schools with special reference to role of classroom teacher. Not open to HSS majors.

**341 Speech/Language Practicum (2)**

Prereq: 240, passing speech proficiency and phonetic proficiency tests. (winter, spring) Diagnosis, planning of therapy, therapy experience in clinical facility. 2 class meetings per wk plus clinic assignment.

**370 Basic Audiology (4)**

Prereq: 250. (winter) Anatomy and disorders of audition. Measurement of hearing with pure tone techniques and interpretation of results of such measurements in terms of social and educational handicap.

**372 Introduction to the Audiology Profession (1)**

Prereq: 370, perm. (spring) Introduction to various areas of field of audiology. Discussions and guest lectures dealing with topics including training, educational audiology, industrial audiology, clinical audiology, and private practice.

**378 Sign Language (3)**

Prereq: not open to HSS majors. (fall, summer) Instruction in manual sign language system used by deaf. Vocabulary, encoding, and decoding signs for purpose of communication emphasized.

**411 Management of Language Disorders in Children (4)**

Prereq: admission to pregraduate program. (spring) Intended to provide students in speech pathology with in-depth knowledge of language intervention strategies for children exhibiting disorders of language. Areas of therapy considered will include development of prelinguistic skills, pragmatic as well as semantic and grammatical aspects of comprehension and production.

**413 Communication Acoustics (3)**

Provides telecommunications majors and other interested students with background materials in acoustics as related to human speech production and perception.

**417 Disorders of Fluency (4)**

Prereq: admission to pregraduate program. (spring) Stuttering related to theory, research, and therapy. Students select and develop area of interest.

**421 Advanced Disorders of Voice (4)**

Prereq: Admission to pregraduate program. Review of anatomy and normal physiology of vocal mechanism. Organic and functional voice problems and related therapy. Research problems in diagnosis and therapy.

**422 Diagnostics (3)**

Prereq: 318, 9 hrs psychology. (fall) Types of diagnosis in evaluation of speech and language problems. Screening tests; use of statistics in testing; basic interview and history procedures.

**433 Professional Training Seminar (3-4)**

Prereq: sr rank, perm. Seminar in concepts underlying therapy procedures.

**442 Senior Speech/Language Practicum (2, max 4)**

Prereq: grade of C or better in 318 and 341. (fall) Diagnosis, planning of therapy, therapy experience in clinic facility. 1 class meeting per wk plus clinic assignment.

**442A Audiology Practicum (2)**

Prereq: 370, 473, admission to pregraduate program. (winter, spring) Experience in audiological diagnosis and evaluation in campus clinical facility and off-campus test sites.

**442C Advanced Speech/Language Practicum (2)**

Prereq: 442, admission to pregraduate program. Application of diagnosis, therapy planning, and therapy techniques.

**444 Disorders of Language (3)**

Prereq: 310, 318. (winter) Introduction to study of disorders of language in children. Diagnosis of problems, assessment of language abilities. Methodologies and techniques in perceptual, psychomotor, and language and speech training.

**463 Pediatric/Educational Audiology (4)**

Prereq: admission to pregraduate program. (spring) Provides students with information relating to audiological evaluation of infants and children. Emphasis on etiological factors of hearing loss and development of auditory function and behavior. Instruction on audiological programming in the educational setting, including procedures for compliance with federal and state legislation.

**471 Auditory Rehabilitation (5)**

Prereq: 370. (winter) Differential diagnosis of children with suspected auditory disorders. Basic remedial procedures employed with hearing handicapped. Practice in planning lessons in speech reading and auditory training.

**498 Special Problems (1-15)**

Prereq: written proposal and perm in qtr prior to registration. Not open to grad students.

**499 Independent Reading in Speech Pathology, Audiology, and Speech Science (1-15)**

Prereq: written proposal and perm in qtr prior to registration. Not open to grad students.

## HISTORY

The major requirement for the A.B. degree consists of a minimum of 52 hours. Unless partly fulfilled as a result of taking a placement test, this total includes eight hours from the 101-123 sequences; HIST 131; and eight hours from the 211-213 sequence. Also required are 32 hours at the 300-400 level, including HIST 301J, two courses in United States history, two courses in European history, two courses from the following fields: the ancient world, Africa, Asia, Latin America, Canada, and the Middle East. The 100 level should be taken during the freshman year and the 200 level during the sophomore year. Unless otherwise stated, the prerequisite for 300-level courses is sophomore standing or above and the prerequisite for 400-level courses is junior or senior standing. Courses in economics, geography, political science, statistics, and sociology and anthropology are suggested as electives. Completion of these requirements fulfills the Arts and Sciences College requirements of at least nine hours in the major at the junior-senior level.

A minor in history consists of a minimum of 28 hours, including at least eight hours at the 100-200 level and at least 16 hours at the 300-400 level. A student pursuing a history minor will plan an academically cohesive program in consultation with a history faculty advisor.

**101 Western Civilization in Modern Times (4) (2S)**

Renaissance to 1648: Renaissance, Reformation, origins of national state system, diplomacy, and imperialism as applied to Portugal, Spain, and Hapsburg Empire, and commercial and scientific revolutions. When possible, majors should take 101-102-103 in sequence. Nonmajors may elect 102 without taking 101; they may elect 103 without taking 101 or 102.

**102 Western Civilization in Modern Times (4) (2S)**

Continuation of 101. Covers 1648 to 1848: absolutism, constitutionalism, operation of coalition diplomacy, and imperialism as applied to France and Britain; westernization of eastern Europe, enlightenment, French Revolution, agricultural, commercial, and industrial revolutions and growth of ideologies — liberalism, socialism, and nationalism. When possible, majors should take 101-102-103 in sequence. Nonmajors may elect 102 without taking 101; or 103 without taking 101 or 102.

**103 Western Civilization in Modern Times (4) (2S)**

Continuation of 101-102. Covers 1848 to present: continued industrial revolution and spread of liberalism, socialism, and nationalism; rise and fall of German bid for power in 2 world wars; new ideologies of materialism, positivism, Social Darwinism, irrationalism, totalitarianism; Russian and Chinese revolutions and international communism; rise and fall of Western empires in Africa and Asia. When possible, majors should take 101-102-103 in sequence. Nonmajors may elect 102 without taking 101; they may elect 103 without taking 101 or 102.

**121 Western Heritage: Classical Age (4) (2H)**

Account of origins of Western heritage from ancient Near East to end of Classical Age. Included are such topics as ancient religions, philosophies, literature, and visual arts with particular emphasis on Greece and Rome.

**122 Western Heritage: Medieval Legacy (4) (2H)**

Discussion of period from decline of Roman Empire to beginning of Renaissance focusing on development of Judaeo-Christian traditions, concept of civilization, and emergent individualism. Important subtopics include growth of universities, chivalry, scholasticism, and humanism.

**123 Western Heritage: Modernity (4) (2H)**

Major intellectual currents and cultural results from time of Renaissance to present examined in humanistic perspective. Included are such topics as origins of modern philosophy, languages, revolutions, political ideologies, and cultural pluralism.

**131 Introduction to Third World History (4) (2T)**

Introduces modern history of non-Western world (Africa, Asia, Middle East, and Latin America) by focusing selectively on significant encounters with West.



**211 American History to 1828 (4) (2S)**  
Political, diplomatic, social, and economic development of American history. Covers 1607 to 1828: colonial America, founding of new nation, and early national period. When possible, majors should take 211-212-213 in sequence. Nonmajors may elect 212 without taking 211; they may elect 213 without taking 211 or 212.

**212 History of the United States, 1828-1900 (4) (2S)**  
Continuation of 211. Covers 1828 to 1900: Jacksonian democracy, territorial expansion, sectionalism and controversy, Civil War, reconstruction, and impact of expanded Industrial Revolution. (See 211 for further suggestions.)

**213 History of the United States Since 1900 (4) (2S)**  
Continuation of 211-212. Covers 1900 to present: progressive movement, WWI, prosperity and depression, WWII, and problems of cold war era. (See 211 for further suggestions.)

**241 Issues in Modern African History (4) (2T)**  
Introduces modern history of Africa by examining 6 basic issues of contemporary importance in historical perspective.

**242 Issues in Modern Asian History (4) (2T)**  
Introduces modern history of Asia by examining 6 basic issues of contemporary importance in historical perspective.

**243 Issues in Modern Latin American History (4) (2T)**  
Introduces modern history of Latin America by examining 6 basic issues of contemporary importance in historical perspective.

**244 Issues in Modern Middle Eastern History (4) (2T)**  
Introduces modern history of Middle East by examining 6 basic issues of contemporary importance in historical perspective.

**265A Hitler and His Nazis (4)**  
*R. Whealey.* Rise of Hitler to 1933; Hitler takeover; totalitarianization of Germany; Nazi foreign policy; WWII; Hitler's war on Jews; Hitler's fall; meaning of Fascism.

**284 Orwell, 1984 and the Future (4)**  
*R. Whealey.* George Orwell's life and works raise issues of imperialism, super-power confrontation, rise of totalitarianism, revolution, capitalism, communism, fascism, and problems of propaganda and civil liberties in America and USSR today.

**297T Honors Tutorial Seminar, U.S. History (3-5)**  
Prereq: admission to Honors Tutorial College. (fall) Covers U.S. history, 1607 to present.

**298T Honors Tutorial Study, U.S. History (1-5)**  
Prereq: 297T. (winter) Independent study, U.S. history.

**299T Honors Tutorial Study, U.S. History (1-5)**  
Prereq: 298T. (spring) Independent study, U.S. history.

**300A Colonial America to 1689 (4)**  
*B. Steiner.* English background, establishment of settlements, first economies, evolution of political and religious structures, relations with England, internal conflicts, Glorious Revolution.

**300B Colonial America, 1689-1763 (4)**  
*B. Steiner.* Governmental changes, credit and currency, Great Awakening, cultural developments, old colonial system, Anglo-French rivalry, nature of colonial society, problems of maturing political units.

**300C Revolutionary Era, 1763-1789 (4)**  
*B. Steiner.* Causes of American Revolution and struggle for independence. Confederation, movement for new government, framing of Constitution.

**301J Historical Research and Writing (4) (1J)**  
Prereq: jr rank. *D. Baxter.* Deals with techniques and mechanics of historical research and writing. After introduction to use of primary and secondary sources and use of history reference material, students will be guided through steps of research and writing: compiling bibliography, analysis of sources, organization of evidence, and style and composition of written paper. Open not only to history majors, but, with perm of instructor, to those of other disciplines interested in history as research tool.

**302 American Indians (4)**  
*R. Dantel.* Treats Indian society before white contact; Spanish, French, and English impact; Indian removal; Indian wars; problems of cultural contact; preservation versus assimilation; Indian society today.

**303 United States in World War II (4)**  
*G. Lobdell.* Military and diplomatic role of U.S. in WWII; political, economic, and social impact of war on that nation.

**304 Founding the American Republic: 1789-1815 (4)**  
Shaping America's political, social, and economic institutions; constitutional development and foreign policy from Federalists (Washington and Adams) through Jeffersonians.

**305 The United States and the Vietnam War (4)**  
Examination of American experience in Vietnam, both in terms of military and diplomatic history of war itself, and its impact on American society.

**306 American Environmental History (4)**  
Prereq: jr/sr rank. A survey of the evolution — from 1565 to the present — of American attitudes toward, and interactions with, the natural world, including such topics as romanticism, the "code of the sportsman," conservation, the "land ethic," and "deep ecology."

**308A Pre-Civil War America, 1815-1850 (4)**  
*P. Field.* New definitions of democracy, westward expansion, early industrialization and class formation, moral reform movements, slavery and sectionalism, Mexican War, conflict of Jacksonian Democrats and Whigs.

**308B The Civil War and Reconstruction (4)**  
*P. Field.* Forces making for increased sectionalism in 1850s; rise of new parties; military engagements; society and institutions in North and Confederacy during wartime; attempts to restructure Southern society after war and why they failed.

**308C Foundations of Modern America: The Gilded Age, 1877-1901 (4)**  
*P. Field.* Labor unrest, nativism and anti-semitism, imperialism, government corruption, Social Darwinism, urban growth, Victorian morality, and Indian wars examined as outgrowths of efforts of American people to adapt to modernization and industrialization in late 19th century.

**310A Twentieth-Century America, 1900-1928 (4)**  
*A. Hamby.* Emphasis on political and cultural history. Major topics include early 20th-century progressivism as an intellectual movement and its manifestations in state and local politics; presidencies of Theodore Roosevelt and Woodrow Wilson; impact of World War I; ambivalent character of the 1920s in American culture and politics; origins and effects of the affluent society.

**310B Twentieth-Century America, 1928-1945 (4)**  
*A. Hamby.* Emphasis on politics, culture, and foreign policy. Major topics include origins and nature of the Great Depression; Franklin D. Roosevelt and the emergence of the modern presidency; political and intellectual character of the New Deal; origins and impact of American involvement in World War II; wartime military history, diplomacy, and politics.

**310C Twentieth-Century America, 1945 - Present (4)**  
*A. Hamby.* Emphasis on politics, culture, and foreign policy. Major topics include origins and nature of the Cold War; impact of foreign involvements on American politics; political leadership in the media age; radicalism and social change in the 60s and 70s; the rise of cultural politics and its effect on economic-based political coalitions; resurgence of conservatism in the 70s and 80s.

**312 History of the Industrial Revolution in the United States, 1850-1917 (4)**  
Origins of factory system, impact of Civil War, rise of heavy industry, problems of financing and control, influence of progressive era.

**313 Jews in American History (4)**  
*M. Fletcher.* Examines political, economic, and religious interaction between Jews and American society. Includes Sephardic and Ashkenazic immigrants, growth of Reform and Conservative Judaism, Zionism, and modern problems of American Jews. From 1654 to present.

**314 Women in American History (4)**  
*R. Dantel.* Changing view American society has taken of role women should play and role women did play. Changing opportunities for women in education and careers. Changing legal status and political rights. Women rebels and reformers.

**314A Social and Cultural History of the United States, 1607-1820 (4)**  
*R. Dantel.* Role of minorities, class structure, and religion in forming American society; development of American painting, architecture, music, literature, education, and science as expressions of Puritanism, enlightenment, and nationalism.



**314B Social and Cultural History of the United States, 1820-1890 (4)**

*R. Dantel.* See 314A for general description. Discusses romanticism, Social Darwinism, and pragmatism.

**314C Social and Cultural History of the United States, 1890 to Date (4)**

*R. Dantel.* See 314A for general description. Discusses pragmatism and existentialism.

**314D American Social Thought to 1815 (4)**

*C. Alexander.* Major aspects of intellectual history of American colonies and U.S. to 1815, organized around 2 major themes: Puritanism, and secularization of American thought in 18th century.

**314E American Social Thought, 1815-1890 (4)**

*C. Alexander.* Major aspects of intellectual history of U.S., 1815-1890, stressing rise of romantic nationalism; triumph of democratic attitude; slavery controversy; impact of Civil War and Darwinian evolution.

**314F American Social Thought, 1890 to the Present (4)**

*C. Alexander.* Major aspects of intellectual history of U.S. since 1890, with principal attention to continuing impact of evolutionary naturalism, especially in development of pragmatism; trends in liberal and conservative political ideologies; rise of pessimistic theology and its ramifications; modernism in arts; New Radicalism and Counter Culture.

**315A History of Blacks in America to 1865 (4)**

(2S)

*M. Fletcher.* Beginning with introduction of slavery in 1619, course deals with black person's role in America through Civil War. Concerns slavery, abolition, and many attempts by black people to improve their position.

**315B History of Blacks in America Since 1865 (4)**

(2S)

*M. Fletcher.* Concerns Emancipation and its continuing effects on black person in America. Life in South, migration to North, and conservative and radical attempts by black community to deal with these problems.

**316A History of United States Foreign Relations to 1914 (4)**

*J. Gaddis.* U.S. foreign relations from war for independence to WWI, stressing development of traditional policies — isolationism, neutrality, Monroe Doctrine — and emergence of U.S. as world power.

**316B History of United States Foreign Relations, 1914-1945 (4)**

*J. Gaddis.* American foreign relations in 2 world wars and interwar period, emphasizing shifting perceptions of vital interests involved in transition from intervention to nonentanglement to intervention again and emergence as superpower.

**316C History of United States Foreign Relations, 1945 to Present (4)**

*J. Gaddis.* American foreign relations in Cold War and after, emphasizing confrontation between U.S. and Communist world, emergence of detente, and background of current foreign policy issues.

**317A Ohio History to 1851 (4)**

*B. Steiner.* Ohio to 1851: prehistoric Ohio, early exploration, settlement, government; statehood and economic development; political parties, anti-slavery movement, constitutional change.

**317B Ohio History Since 1851 (4)**

Ohio since 1851; pre-Civil War politics, Civil War. Economic and political transition during post-Civil War. 20th-century problems. Biographical sketches.

**318 American Westward Movement (4)**

*R. Dantel.* American West: Appalachian West, Ohio frontier, Far West. Explorers, fur traders and trappers, miners, cattlemen, stage lines and railroads, farmers. Conservation.

**319 Sports in American History (4)**

*C. Alexander.* Survey of evolution of organized sports in U.S., focusing on major spectator sports. Emphasis on personalities and particular events rather than sociological and psychological theorizing.

**319A American Baseball History (4)**

*C. Alexander.* Survey and interpretation of the history of baseball in the U.S., from baseball's origins in European-derived stick-and-ball games; through baseball's codification, organization, and emer-

gence as the nation's first accepted professional sport; on through its ascendancy by the early 20th century; and finally to its maturation in the century's middle decades as big corporate business. The course deals both with the place and significance of baseball in American society and with the history of the sport itself, in terms of playing styles, personalities, and major teams.

**320 History of the Middle West (4)**

Development of political, economic, and social institutions and attitudes characteristic of Ohio and Middle West since 1787. Includes 20th-century community relationships, problems, and forms of behavior.

**321A History of the Military in America: 1600 to 1898 (4)**

*M. Fletcher.* Military institutions in American history; role of technology in warfare; innovations and reforms in military; war and its conduct; military and civilian society in war and peace.

**321B History of the Military in America: 1898 to Present (4)**

*M. Fletcher.* Continuation of 321A. See 321A for description.

**323A Latin American History: The Colonial Era (4) (2T)**

*M. Grow.* Course examines historical origins of Latin American society. Themes include: internal nature of Iberian and pre-Columbian Indian societies, circa 1492; conquest and subordination of Amerindian civilizations by Spain and Portugal; distribution of power, land, and labor in post-conquest Latin America; order and instability in colonial society; and region's position in international economy.

**323B Latin American History: The 19th Century (4) (2T)**

*M. Grow.* Course examines 19th-century origins of modern Latin American underdevelopment, focusing on causes and consequences of Revolutions of Independence; dynamics of dictatorship and democracy in post-Independence Latin American political culture; and decision-making process by which Latin America's 19th-century leaders integrated their national economies into international economic system as specialized exporters of raw materials.

**323C Latin American History: The 20th Century (4) (2T)**

*M. Grow.* Survey of modern Latin American history focusing on causes and consequences of structural instability in Latin America since 1900. Special emphasis is placed on collapse of region's traditional liberal/export model of national development in 1930s; competing political/ideological responses to structural crisis in region (social revolution, authoritarianism, democratic change); and ongoing search for viable formulas of economic development.

**325 History of U.S.-Latin American Relations (4)**

*M. Grow.* Survey of Inter-American relations in the 19th and 20th centuries, focusing on evolving, and often conflicting, definitions of national interest which have shaped U.S. and Latin American policy orientations toward one another.

**328 The World of Aristophanes (3)**

*D. Richter.* Political, social, and cultural life of Athens in so-called Golden Age of ancient Greece, 5th century B.C. Special attention to Aristophanes' comedies as mirror of this period.

**329A Ancient Egypt and Mesopotamia (4)**

*D. Richter.* Prehistoric eras; origins of Mediterranean civilizations; problems of ancient chronology; civilizations of Sumerians, Babylonians, Egyptians, Assyrians, Biblical Hebrews, and Persians. Stresses archaeological and literary sources, comparative social and religious concepts, acculturation, contributions to Western civilization.

**329B Ancient Greece (4)**

*D. Richter.* Aegean prehistory, Minoan civilization, Mycenaean Greeks, Dorian invasions, Greek Renaissance, growth of polis, Athenian society and culture, Persian and Peloponnesian Wars, political history of Greece to Alexander. Stresses archaeological sources, mythology, and drama. Hellenic contributions to Western civilization.

**329C Ancient Rome (4)**

*D. Richter.* Early peoples of Italy, Etruscans, constitutional development of Republic, growth of empire, civil wars, history of principate to Constantine. Stresses archaeological sources, Latin literature, Roman life and institutions, Roman contributions to Western civilization.

**330 History through Film (4)**

Examination of selected topics in U.S., European, or Third World history through films and readings accompanied by lectures and discussion.

**331 The Ancient Greek Games:  
The Panhellenic Festivals (4)**

*W.P. Kaldis.* Examines panorama of Greek athletic activity over period of approximately 3,000 yrs, beginning with Minoan or Cretan civilization, ca. 3000 B.C., and terminating with decline of polis, or Greek city-state, ca. 146 B.C. Explains how Panhellenic festivals helped to unite various currents of Greek civilization.

**333 Oil, Energy, and International Diplomacy (4)**

*G. Doxsee.* Energy crisis in historical perspective. Focus on oil industry during past century with particular attention to Middle East and North Africa; economic, environmental, geological, political, and technological elements of current situation.

**334 The Arab-Israeli Dispute (4)**

*G. Doxsee.* Analysis of underlying causes of Arab-Israeli confrontation from 1890s to present, including origins of Arab nationalism and Zionism, evolution of British Mandate in Palestine, Great Power involvement in Middle East, and recent developments in conflict between Israel and Arabs.

**335A Survey of Middle East History to 1800 (4) (2T)**

*G. Doxsee.* Islamic history and civilization from rise of Islam to end of 18th century. Includes discussion of role of prophet Muhammad, doctrines and institutional system of Islam, medieval Islamic caliphates and their cultural achievements, and contributions of Persians and Turks to Islamic civilization.

**335B Survey of Middle East History Since 1800 (4) (2T)**

*G. Doxsee.* History of Middle East since era of French Revolution. Transformation of Ottoman and Persian Empires into 20th-century Middle East states; impact of nationalism, secularism and industrialism on region; and position of Middle East in contemporary world affairs.

**336A North Africa in Modern Times (4)**

*G. Doxsee.* Maghrib: its geography, ethnic composition, and history since antiquity; French conquest of Algeria, Tunisia, and Morocco; administrative systems; economic development; French-Muslim relations.

**336B North Africa Since 1914 (4)**

*G. Doxsee.* Rise of nationalism; struggle for political independence; political, economic, and social problems in independent North Africa; North Africa in world affairs.

**338 History of West Africa (4)**

*A. Booth.* History of West Africa from early times to present; peopling of sudanic and forest regions; development of trade; Islam and rise of sudanic empires; slave trade and forest states; colonial era; independence movements; problems of nationalism.

**338A History of East Africa (4)**

*S. Miers.* History of East Africa from early times to present, with particular emphasis on period since 1750. Although neighboring countries also studied, greatest attention paid to region which comprises present-day Kenya, Uganda, and Tanzania.

**341A Early Africa (4) (2T)**

*S. Miers.* Africa in ancient world; spread of agriculture and iron working; rise of Islam; migrations of peoples; development of states; arrival of Europeans; beginning of slave trade.

**341B Traditional Africa (4) (2T)**

*S. Miers.* Slave trade; religious revolutions in western Sudan; development of African states; commercial revolution of 19th century; birth of plural society in South Africa; European partition of Africa.

**341C Modern Africa 1890-Present (4) (2T)**

*S. Miers.* Establishment of European rule in Africa; colonial period; rise of nationalism; decolonization and independence; problems of modern Africa.

**342A South Africa to 1899 (4)**

*A. Booth.* Establishment and transformation of African societies (Bantu migrations); coming of Europeans; evolution of Cape society (black, white, colored); conflicting nationalisms; Great Trek; rise of Zulu empire and *mfecane*; mineral revolution and subjection of African chiefdoms; British imperialism and coming of South African war.

**342B South Africa Since 1899 (4)**

*A. Booth.* South African (Boer) War and reconstruction; formation of Union; global war and racial/regional/class conflicts over land, labor, and politics; rise of Afrikaner nationalism and triumph of *apartheid*; rise and radicalization of African nationalism; collision

of nationalisms and expansion of conflict in 1970s; South Africa and modern world.

**343 Revolutions in Southern Africa (4)**

*A. Booth.* Historical background, and developments up to present, of revolutions in Mozambique, Angola, Zimbabwe (Rhodesia), Namibia (South West Africa), and Azania (South Africa). Format is 2 lec, 1 discussion, and 1 film per wk.

**344A History of the Malay World (4)**

*W. Frederick.* Comparative view of Southeast Asian archipelago, emphasizing Indonesian civilization after 1750. Penetration of West, struggle with imperialism and modernization, and present dilemmas. Indigenous views focus of attention.

**344B History of Burma and Thailand (4)**

*W. Frederick.* Comparative study of neighboring Buddhist states, emphasizing themes of change and continuity since mid-18th century. Special attention given to divergent responses to colonialism and Western-style development, and similarities in political and social forms.

**344C History of Vietnam (4)**

*W. Frederick.* Modern Vietnamese civilization since 15th century, emphasizing political and social change after 1800. Special attention given to Vietnamese struggle with outside powers, including China, France, U.S., and Soviet Union.

**344D Chinese in Southeast Asia (4)**

*D. Jordan.* Historical role of this potent immigrant community in setting of Southeast Asian countries. China's imperial interests in area, tribute systems, relationships between overseas Chinese, European colonialists, and indigenous peoples and role of Chinese communities in contemporary Southeast Asian politics.

**345A Southeast Asia to c. 1750:  
The Creative Synthesis (4) (2T)**

*W. Frederick.* Highlights of pre- and proto-history and development of classical states. Emphasis on cultural synthesis (Hindu, Buddhist, Muslim, and animist influences) and theme of change and continuity in both Great and Little traditions of region.

**345B Southeast Asia, c. 1750 to 1942:  
Change and Conflict (4) (2T)**

*W. Frederick.* Indigenous change and widening effects of Western penetration, with emphasis on social and cultural developments. Nature of colonialism in region, and response of colonized seen in light of both traditional and modern influences.

**345C Southeast Asia, 1942 to the Present:  
The Search for Stability (4) (2T)**

*W. Frederick.* Japanese occupation and its relationship to great national revolutions of 1940s. Social and cultural context of nationalism and revolt, search for new political forms, and struggle against disunity and poverty.

**346A Traditional China (4) (2T)**

*D. Jordan.* Follows developments in the Chinese civilization from the Shang bronze age, through primary philosophies, and up to final refinements of its massive imperial government and traditional society in the 1800s.

**346B Modern China (4) (2T)**

*D. Jordan.* Weakness of empire in 1800s confronted by dynamic Western economic and political imperialism; response to pressures of nationalism from without and from within; great flux in modern Chinese society and politics.

**348A Traditional Japan (4)**

*D. Jordan.* Traces major elements of Japanese culture and thought from their indigenous origins, through major Chinese influence, results of medieval civil warfare, and up to premodern workings of Japan's sophisticated commercial economy.

**348B Modern Japan (4)**

*D. Jordan.* Political weakness of Tokugawa system leading to opening of Japan to Western trade and restoration of emperor; favorable economic and political base which allowed Japan to enter successfully into competition with European nations; Japan's ultra-nationalist era and postwar reconstruction.

**350 The Civilization of India (4)**

*D. Jordan.* Environmental and spiritual influences on Indian civilization; Hindu and Muslim lifestyles; successive influxes of foreign peoples and cultures; evolution of Indian traditions. Indian literature and readings on Indian culture set in historical framework.

**351 Medieval People (4)**

*C. Reeves.* Inquiries in depth into lives and epochs of representative individuals of medieval Europe: Middle Ages through biography.

**352 Medieval Civilization (4)**

*C. Reeves.* Survey of cultural and intellectual history. Transmission of Christianity and classical culture to barbarians and their work of combining them into new civilization in early Middle Ages. Medieval civilization at its height: Church, schools and scholastic thought, and secular culture.

**353A The Early Middle Ages (4)**

*C. Reeves.* Foundation of Medieval synthesis, 300-1100; collapse of Roman world, establishment of successor states, spread of Christianity, formation and development of European culture.

**353B The Later Middle Ages (4)**

*C. Reeves.* Maturing of medieval Europe and transition to early modern era, 1100-1450; developments in commerce, religious life and institutions, governments, politics, learning, and secular culture.

**354 Early Christianity: East and West (4)**

Will investigate historical development and spread of Christianity from its origins to about A.D. 600. Content includes Greek and Hebraic backgrounds, early church fathers of East and West, ecumenical councils, early heresies, and development of church doctrine.

**356A The Italian Renaissance (4)**

*P. Bebb.* Major political, social, economic, and cultural currents of Italian city-states from 1150 to 1550. Focus on Dante, Petrarch, Boccaccio, Bruni, Machiavelli, Guicciardini, Michelangelo, Leonardo da Vinci, etc.

**356B The Northern Renaissance (4)**

*P. Bebb.* History of Renaissance outside Italy: politics, economics, sociology, and intellectual currents of Germany, France, Spain, Burgundy, and England from 1300 to 1600. Treated thematically, course focuses on Erasmus, More, Ximenes, Reuchlin, Hutten, Bude, etc.

**356C The Reformation (4)**

*P. Bebb.* Protestant, Catholic, and Counter-Reformations in Europe, showing their relationships to social, political, economic, and religious movements of 15th and 16th centuries. Roles of Luther, Zwingli, Calvin, Cranmer, Erasmus, Loyola, etc.; Protestant and Catholic churches and sects in western and eastern Europe.

**357 Florentine People (4)**

*P. Bebb.* Major figures in Florence from 1300 to 1600, from Dante to Galileo; concerns are with some originators of modern thought in areas of artistic theory, poetic form, Italian language, political ideas, scientific method, and historical composition.

**358A Early Modern Europe, 1559-1648 (4)**

*D. Baxter.* Europe from 1559 to 1648. Main political, economic, and social developments in Europe during Age of Spanish Preponderance: Philip II, wars of religion, Richelieu, Thirty Years' War, and ideological struggles.

**358B Early Modern Europe, 1648-1715 (4)**

*D. Baxter.* Europe from 1648 to 1715. Main political, economic, and social developments in Europe during Age of Louis XIV: French hegemony, rise of balance of power, absolutism.

**358C Early Modern Europe, 1715-1774 (4)**

*D. Baxter.* Europe from 1715-1774. Main political, economic, and social developments in Europe during 18th century: despotism, diplomatic revolution, competition for empire, Enlightenment.

**360 Women in European History (4)**

*R. Harvey.* The family, work, feminism, and women and politics are major topics of this introduction to women's history in France, England, Germany, and Russia from Renaissance to present, with emphasis on more recent developments. Lec. discussions, films, slides, and guest speakers.

**362A Europe, 1814-1871 (4)**

*L. McGeoch.* Europe from Congress of Vienna through Franco-Prussian War, including growth of liberalism and nationalism, revolutions of 1830 and 1848, Industrial Revolution, unification of Italy and Germany, social and intellectual movements.

**362B Europe, 1871-1914 (4)**

*L. McGeoch.* Development of Austria-Hungary, France, Italy, Germany, Great Britain, and Russia, including imperialism, background of WW I, and social and intellectual movements.

**364A Europe Between World Wars (3)**

*R. Whealey.* Fascism, Communism, World Depression, and Twenty-Year Armistice between 1919 and 1939. Economic and cultural approach.

**364B Contemporary Europe (4)**

*R. Whealey.* Cold War, Communist bloc, European integration, decolonization, Gaullist regime, and problems of present-day Europe.

**365 Spain and Portugal Since 1898 (4)**

*R. Whealey.* Survey of political, social, economic, diplomatic, and ideological trends.

**366A Modern France in the 19th Century (4)**

*J. Chastain.* Rise and fall of Napoleon; his impact on France and Europe; monarchist interlude; revolution of 1848 and election of Louis Napoleon; Second Empire, liberal and authoritarian; wars and transformation of Europe; fall of Napoleon and Paris Commune; Third Republic.

**366B Modern France in the 20th Century (4)**

*J. Chastain.* Dynamic and stagnant aspects; nostalgia and rejection of 20th century; impact of 20th century; democracy in France; European and colonial wars; communist movement from Popular Front to Common Program; anti-communism in France; French in changing world; De Gaulle, his predecessors, and his successors.

**368A Modern Germany in the 19th Century (4)**

*J. Chastain.* Cosmopolitanism and movement to create national German state; rise of capitalism and decline of handicraft; liberation of German peasantry; revolution of 1848 and reaction; blood-and-iron chancellor; Germany's rise to European predominance; rise of worker movement; German society at turn of century.

**368B Modern Germany in the 20th Century (4)**

*J. Chastain.* Germany on eve of WWI; military fiasco and creation of Weimar Republic; Weimar, Berlin, Munich, and Dresden; attempt to forge democracy; Third Reich and transformation of German society; WW II and Final Solution; Communist Germany and Federal Germany; 2 societies and 2 states since 1945.

**370 History of Byzantine Empire, 324-1453 (4)**

*W. Kaldis.* Decay of Roman World and emergence of Christian empire, 324-717; medieval Roman Empire, 717-1056; weakening of central administration and apparent revival under Comneni, 1025-1204; Byzantium and neighboring world, 1204-1453; church and state; education and learning; Byzantine art; social, political, and military developments.

**372A Balkans in Early Modern Period, 1453-1804 (4)**

*W. Kaldis.* Ethnographic structure of Balkan peoples under rule of Ottoman Empire. Ottoman institutions and society; political, social, economic, religious, and cultural developments in Balkans in 15th, 16th, 17th, and 18th centuries.

**372B Balkans in 19th Century, 1804-1878 (4)**

*W. Kaldis.* Evolution of modern Balkan nationalism and rise of Balkan states. Ottoman dissolution and Balkan revolutionary nationalism; political, social, economic, religious, and intellectual developments; domestic Balkan policy and foreign intervention.

**372C Balkans in 20th Century, 1878 to Present (4)**

*W. Kaldis.* Historical, cultural, and ethnic background of Balkan peoples. Social, economic, political, and intellectual developments in Balkans and East Europe; communication of southeast European states.

**374A Balance of Power: Napoleon to the Kaiser (4)**

*L. McGeoch.* Diplomatic history from Congress of Vienna to WWI, including age of Metternich, Italian and German unification, new imperialism, and prewar alliances and alignments.

**374B History of International Diplomacy, 1914-1939 (4)**

*R. Whealey.* International problems of peace and war, international organization and alliances. Theme: origins of WW II.

**374C History of International Diplomacy, 1939 to Present (4)**

*R. Whealey.* International problems of peace and war on world-wide scale since 1939, international organization and alliances. Theme: global balance of power.

**375 World War I (5)**

*D. Richter.* Covers the origins of the war, both diplomatic and strategic, as well as the peace-making afterward, but the central focus will be the war itself: the major offensives, Allied and German strategies and tactics, trench warfare of the Western Front, chemical warfare, the war in the air and on the seas, the home front, the use of the machine gun and the tank.

**376 Biography: Leaders in 19th Century Europe (4)**

*L. McGeoch.* Lives of great and near great as they influenced history.

**378 Espionage and History (4)**

*A. Booth.* Historical perspective on modern secret intelligence operations, including espionage, propaganda, disinformation, cryptography, and counterintelligence. Examination of role of secret intelligence in foreign policy and national public policy, especially in times of war and crisis. Attention paid to intelligence and national security requirements of societies valuing openness and human freedom. Course stresses specific historical examples.

**379 The Development of Modern Science (4)**

*R. Rauschenberg.* Survey of development of science from Renaissance. History of physical and natural sciences in ages of Copernicus, Newton, Linnaeus, and Darwin.

**381 History of the Family (4)**

*D. Baxter.* Chronological examination of historical development of Western family (European and American) from Middle Ages to 20th century. Women's roles examined.

**382A History of Russia (4)**

*S. Miner.* Russian origins, Greek and Mongol influences, expansion of Muscovy, Ivan the Terrible, Peter the Great, Catherine the Great, Russia as great power, and shapes of its 19th-century society.

**382B Russia: Road to Revolution 1825-1917 (4)**

From tsarist Russia to communist revolution. Background for revolution: origins of Russian socialism, rapid social and economic change, 1905 Revolution, war and the collapse of the Romanov dynasty in 1917.

**382C Soviet Union (4)**

*S. Miner.* Soviet Union since the 1917 Revolution. Stalinism, WW II and expansion, Khrushchev, Brezhnev. Emphasis on internal affairs.

**389 Later Medieval England, 1307-1485 (4)**

*C. Reeves.* Age of Chaucer and Wars of the Roses. Investigation of political, social, intellectual, ecclesiastical, and economic aspects of period of ferment and rapid change.

**390A Tudor England (4)**

*R. Harvey.* England in 16th century: Tudor absolutism, English Reformation, and major cultural and economic developments of Shakespeare's England.

**390B Stuart England (4)**

*R. Harvey.* England in 17th century: constitutional crisis of Stuart period, republican experiment under Cromwell, and major cultural and economic developments.

**391A English History to 1688 (4)**

*C. Reeves.* For English, political science, and prelaw majors and general students of history. Survey of institutional aspects of medieval England and social, political, and constitutional developments in Tudor and Stuart periods.

**391B English History Since 1688 (4)**

*R. Rauschenberg.* For English, political science, and prelaw majors and general students of history. Emphasizes cultural and economic developments, growth of British Empire, constitutional and social reforms, and impact of WW I and WW II.

**392A Georgian England (4)**

*R. Rauschenberg.* Survey of political, social, intellectual, cultural, and economic developments of England in years prior to and during American and French revolutions.

**392B Victorian England (4)**

*R. Rauschenberg, D. Richter.* Survey of England's history in 19th century, including examination of major political, cultural, and economic trends.

**392C 20th Century England (4)**

*R. Rauschenberg.* Survey of English history in 20th century concentrating on political, cultural, and economic developments.

**394A The Medieval English Constitution (4)**

*C. Reeves.* English government from Anglo-Saxon times to end of Middle Ages. Growth of machinery of monarchy, central administration, courts and common law. Rise of Parliament.

**394B The Modern English Constitution (4)**

*R. Harvey.* Emergence of modern English constitution during 16th and 17th centuries: creation and growth of Tudor Constitution; significance of English Reformation for constitution; Tudor Parliament; "Century of Revolution" (1603-1689) and crisis of Constitution; problems of sovereignty and obligation; constitution today.

**395 History of Canada (4)**

*R. Rauschenberg, J. Chastain.* Introduction to Canada: study of its exploration, and development under France and England, and its emergence as important modern nation.

**396J Writing on Historical Themes (4)**

(1J)

Prereq: jr rank. Students will study and write on selected historical themes. Equal emphasis on historical materials and writing. Fulfills jr-level English composition requirement.

**397T Honors Tutorial Study, European History (1-5)**

Prereq: admission to Honors Tutorial College. (fall) Covers European history from Renaissance to present.

**398T Honors Tutorial Study, European History (1-5)**

Prereq: 397T. (winter) Independent study, European history.

**399T Honors Tutorial Study, European History (1-5)**

Prereq: 398T. (spring) Independent study, European history.

**401A Studies in Colonial American History (4)**

Prereq: 24 hrs and perm. *B. Steiner.* Literature and source materials of colonial American history. Readings and reports.

**401B Studies of the Era of the American Revolution (4)**

Prereq: 24 hrs and perm. Literature and source materials of American Revolution. Readings and reports.

**405 Studies in the Foundation of the American Republic, 1783-1819 (4)**

Prereq: 24 hrs and perm. Literature and source materials of early national period of American history. Readings and reports.

**407 Studies of the Era of Sectional Controversy: 1819-1850 (4)**

Prereq: 24 hrs and perm. Literature and source materials of era of sectional controversy, 1819-1850. Readings and reports.

**409 Studies in the Era of the Foundations of Modern America, 1850-1901 (4)**

Prereq: 24 hrs and perm. Literature and source materials for period 1850-1901 in U.S. history. Readings and reports.

**411 Studies in the History of the United States in Recent Times (4)**

Prereq: 24 hrs and perm. *A. Hamby, C. Alexander.* Literature and source materials of recent U.S. history. Readings and reports.

**415 Studies in the Social, Cultural, and Intellectual History of the United States (4)**

*R. Daniel, C. Alexander.* Selected topics.

**417 Studies in the History of American Foreign Relations (4)**

Prereq: 24 hrs or perm. *J. Gaddis.* Literature and source materials of American foreign relations. Readings and reports.

**421 Studies in Regional History (4)**

Prereq: 24 hrs and perm. Literature and source materials of U.S. regional history. Readings and reports.

**424 Studies in the History of U.S.-Latin American Relations (4)**

Prereq: 325 or perm. *M. Grow.* Readings and research papers on major issues in 20th-century U.S.-Latin American relations.

**426 Dictatorship in Latin American History (4)**

Prereq: jr rank or perm. *M. Grow.* Focuses on predominant type of political/governmental system in Latin America: authoritarian dictatorship. Examines major examples of 20th-century ideological authoritarianism in Latin America: ranging from populist authoritarianism of Juan Peron in Argentina to bureaucratic authoritarian regimes recently in power in Southern Cone and Brazil. Attention devoted to competing schools of interpretation which attempt to explain recurring phenomenon of non-democratic forms of government in Latin America.

- 427 Studies in Recent Latin American History (4)**  
Prereq: perm. *M. Grow*. Literature and source materials of recent Latin American history. Readings and reports.
- 429 Studies in the History of Ancient Greece (4, max 8)**  
Prereq: 24 hrs and perm. *D. Richter*. Literature and source material of ancient Greek civilization. Readings and research paper. Themes vary from qtr to qtr. May be repeated for credit.
- 435 Studies in Middle East History (4)**  
Prereq: 24 hrs or perm. *G. Daxsee*. Selected topics on Middle East since 1914. Readings and reports.
- 441 Studies in African History (4)**  
Prereq: 24 hrs and perm. *A. Booth*, *G. Daxsee*, *S. Miers*. Literature and source materials of African history. Readings and reports.
- 445 Studies in the History of Southeast Asia (4)**  
Prereq: two 300- or 400-level courses in social sciences or humanities dealing with Asia. *W. Frederick*. Literature of Southeast Asian history and culture generally, with particular emphasis on selected developments in 19th and 20th centuries. Readings and reports.
- 449 Studies in the History of East Asia in Modern Times (4)**  
Prereq: two 300- or 400-level courses in social sciences or humanities dealing with Asia. *D. Jordan*. Historical literature relating to process of modernization of China and Japan from 1860s to 1960s. Readings and reports.
- 461 Proseminar in French Revolution (4)**  
Prereq: 24 hrs and perm. Oral reports and class discussion. Myth and reality of revolution. Study of ideas, episodes, and individuals in French Revolution.
- 463 Studies in 19th Century Europe (4)**  
Prereq: 24 hrs or perm. *L. McGeoch*. Literature and source material of 19th-century Europe. Readings and reports.
- 467 Studies in Modern France (4)**  
Prereq: 24 hrs and perm. *J. Chastain*. Literature and source material of modern France. Readings and reports.
- 483 Studies in Russian and Soviet History (4)**  
Prereq: 24 hrs and perm. *S. Miter*. Literature and source material of Russian and Soviet history. Readings and reports.
- 491 Studies in Early Modern English History (4)**  
Prereq: 24 hrs plus perm. *R. Harvey*. Studies in early modern English history from multi-disciplinary perspectives.
- 493 Studies in British History Since 1714 (4)**  
Prereq: 24 hrs and perm. *R. Rauschenberg*. Literature and source material of British history since 1714. Readings and reports.
- 495 History Internship (5)**  
Prereq: jr or sr rank, history major, 3.0 g.p.a. Designed to enhance skills for history majors through history-related work assignments in public and private agencies.
- 496 Quantitative Methods in History (4)**  
*P. Field*. Introduction to descriptive and inductive statistical techniques used in historical research and analysis of current literature employing such techniques. Instruction in use of computer.
- 497T Advanced Honors Tutorial Study (1-5)**  
Prereq: 299T, 399T. (fall) Independent study, advanced level.
- 498 Problems in History (1-5, max 9)**  
Prereq: 24 hrs, perm. Intensive individual work either in research or individual systematic reading along lines of student's special interest and under supervision of staff member.
- 498T Advanced Honors Tutorial Study (1-5)**  
Prereq: 497T. (winter) Independent study, advanced level.
- 499 Honors Studies of Selected Historical Topics (1-5, max 15)**  
Prereq: perm. Study, reading, research, and writing on selected topic; intended for students who plan to graduate with honors in history. Arrangements should be made during jr yr.
- 499T Advanced Honors Tutorial Study (1-5)**  
Prereq: 498T. (spring) Independent study, advanced level.

## HOME ECONOMICS

### Child Development and Family Life (HECF)

- 160 Introduction to Child Development (4) (2S)**  
Fundamental patterns of development and behavior during prenatal period through early childhood. 4 lec. No credit awarded if EDEL 200 or PSY 273 has been taken.
- 299 Sophomore Practicum — Professional Assessment (5)**  
Prereq: soph rank, perm. (fall) Provides professional experience for sophs who have declared majors in child development and family life. Seminar sessions and performance assessment provide opportunity to assess professional competence at this level. No credit if HECF 299 has been taken.
- 360 Human Sexuality (3)**  
Exploration of effect of human sexuality on aspects of one's ability to form relationships which are integrative, creative, and recreative. Emphasis on realization of dynamic potential in wholeness of life pattern and in relationships. In light of scientific research.
- 361 Principles of Preschool Guidance (4)**  
Prereq: 160 or PSY 273 or EDEL 200, or perm. (fall) Application of theories and principles of preschool guidance by directed observation of adult-child interactions, and supervised participation in early childhood education programs. 2 lec, 3 lab.
- 363 Creative Experiences with Preschool Children (4)**  
Prereq: 361. (winter) Selection, preparation, presentation, and evaluation of activities and materials in art, music, language, psychosocial, and physical development for early childhood programs. 3 lec, 3 lab.
- 364 Premath and Science with Young Children (4)**  
Prereq: 361, BOT or ZOO 101. (winter) Examples of early childhood programs, primary elements and issues that differentiate them. Selection, preparation, presentation, and evaluation of premath and science activities and materials. 3 lec, 3 lab.
- 365 Infant Education (4)**  
Prereq: 160, 361. (fall) Knowledge of ways in which children from birth to 3 yrs learn; opportunity to structure environment to foster social, emotional, cognitive, and physical development of infant, as well as understanding of issues and trends in infant education.
- 366 Practicum in Early Childhood Education (6)**  
Prereq: 361, 363, 364. Lab experience in assisting the planning, guiding, supervising, and evaluating preschool children's growth and behavior in all phases of early childhood education programs. Required for students in the associate degree program.
- 370 Family Living (3)**  
Person-centered analysis of basic human relationship processes leading to successful modern American marriage and family experience. Special discussion and analysis of problems in beginning family stage. Not open to fr. 3 lec.
- 371 Family Development (3)**  
Prereq: 5 hr general psychology. Synthesis of essential concepts useful in comprehending families in light of developmental concept for family analysis through stages of family life cycle. 3 lec.
- 380 Death and Dying (4)**  
Prereq: jr rank or perm. (spring) Examines why people fear death, how death affects family relationships, dynamics of guilt and bereavement, meanings of death, processes of dying, disposition of body, caring relationships. Synthesizes multiple dimensions of death and dying.
- 399 Junior Practicum — Professional Development (5)**  
Prereq: HECF major, jr rank, perm. Provides student with practical field-based experience in professional areas. Competency assessment made at jr level.
- 400 Senior Seminar (3)**  
Prereq: concurrent with 464. (winter) Provides opportunity for comprehensive assessment in relation to personal and professional growth prior to exiting program as professional in child development and family life.



**462A Pluralistic Life Styles (2)**

Prereq: jr or sr rank or perm. (fall, alternate years) *E. Stricklin*. Analysis of emerging pluralistic marriage and family life patterns in American society.

**462B Parenthood (2)**

Prereq: jr or sr rank, perm. (winter, alternate years) Analysis of dynamics of parenthood.

**462C Middle Childhood (2)**

Prereq: jr or sr rank, perm. (spring, alternate years) Analysis of developmental tasks of middle childhood years as they reflect and influence family guidance and transmission of values.

**462D The One-Parent Family (2)**

Prereq: jr or sr rank or perm. (fall, alternate years) Analysis of dynamics of 1-parent family in light of its needs, challenges, and distinctive characteristics.

**462E Youth Identity Crisis (2)**

Prereq: jr or sr rank, perm. (winter, alternate years) Analysis of identity crisis in terms of its psychosocial aspects of adolescence.

**462F The Aged Family (2)**

Prereq: jr or sr rank or perm. (spring, alternate years) *E. Stricklin*. Synthesis of multiple dimensions of aged family.

**463 Preschool Administration (5)**

Prereq: 363 and 364. (spring) History, philosophy, and objectives of preschool education including current trends. Problems in organizing and administering preschools, play groups, and Head Start programs with emphasis on housing, staff, schedules, and financing. Field trips to selected programs. 4 lec.

**464 Early Childhood Practicum (6-12)**

Prereq: 363 and 364, sr rank. (winter, spring) Lab experience in planning, guiding, supervising, and evaluating preschool children's growth and behavior in all phases of early childhood education programs.

**465 Parent Education (4)**

Prereq: 160, 361, or perm. (fall) Philosophy, techniques, materials, and methods used in working with parents. Opportunities for observation and participation with parent groups, parent conferences, and home visitations.

**467 Theories of Child Development (4)**

Prereq: jr or sr rank, perm. (fall) Review of theories of child development with synthesis approach for student in early childhood education programs.

**471 Family Life Education (4)**

Prereq: perm. History, philosophy, and objectives of family life education, including current trends. Selected fundamental educational problems explored. Examination of various dimensions of teacher's role and critical appraisal of student's professional competency to teach classes in family life education.

**472 Special Studies in Human Development (2-5)**

Prereq: sr rank, perm. In-depth study in selected area.

**479 Special Studies in Family Ecology (2-5)**

Prereq: sr rank, perm. In-depth study in selected area.

**499 Field Experience in Child Development and Family Living (12)**

Prereq: HECF major, sr rank. On-the-job training through cooperation with social, welfare, or community agencies, hospitals, early childhood programs.

## Consumer Education (HECE)

**250 Introduction to Independent Living Rehabilitation (3)**

Explores historical development, philosophy, legislation, community resources, research, and professional literature which provide base of knowledge in field of independent living. Focuses on interdisciplinary cooperation in providing services in independent living. No credit if HS 401 has been taken.

**299 Sophomore Practicum — Professional Assessment (2-5)**

Prereq: soph rank, perm. (fall) Provides professional experience for sophs who have declared majors in consumer service and educa-

tion. Lab experience, seminar sessions, and performance assessment provide opportunity to assess professional competence at this level. No credit if HECF 299 has been taken.

**340 Teaching of Home Economics (2-4)**

Prereq: 299, jr rank. (fall) Home economics programs at jr and sr high school level. Special emphasis on vocational education, curriculum development, evaluation procedures, and methods of teaching.

**341 Job Training Methods (4)**

Prereq: 24 hrs of home economics. (fall) Exploration and development of personal and professional competencies necessary for teaching in vocational home economics job training programs.

**345J Writing in Home Economics (4)**

(1J)

Prereq: jr rank. Investigation and analysis of current issues and concerns in home economics profession. Emphasis placed upon developing variety of writing formats in order to communicate effectively with selected audiences.

**390 Family Consumer Economics (3)**

Management of personal and family financial problems. Emphasis on consumer's role in economy.

**391 Equipment (4)**

Prereq: 390. Selection and use of household equipment including materials, construction, operation, and care. 4 lec, 2 lab.

**395 Home Management (3)**

Prereq: soph rank. Decision making applied to use of family resources with purpose of creating family environment in which optimum human development will occur.

**396 Home Management Laboratory (4)**

Prereq: 395, soph rank, HEFN 120, perm. Principles of decision making and management in group living situation. Home Management House experience provided.

**399 Junior Practicum —****Professional Development (2-5)**

Prereq: 340, jr rank, perm. Lab experiences with school and community agencies. Competency assessment at jr level.

**400 Senior Seminar (1-3)**

Prereq: concurrent with 499B. Provides opportunity to share ideas and assess oneself in relation to personal and professional growth before exiting program as professional home economist.

**439 Studies in Household Equipment and/or Management (2-4, max 6)**

Prereq: 391, 395. Provides opportunity for student to pursue study in selected area of home management and/or household equipment, under supervision.

**441 Evaluation in Home Economics (3)**

Prereq: 24 hrs of home economics. Evaluation and assessment methods and techniques in relation to process and products in home economics programs and professions.

**442 Home Economics Education Practicum (2-4, max 8)**

Prereq: perm. Concentrated study in area of interest such as adult programs, special education programs, job training experience, and work with handicapped people.

**443 Vocational Home Economics (4)**

Prereq: 340 or teaching experience in home economics. *S. Slater*. History and philosophy of vocational home economics. Contemporary trends, methods, sources of materials, and evaluation. Observation arranged.

**444 Home Economics in Adult Education (4)**

Prereq: 26 hrs. (winter) Organization procedures, curriculum materials, and methods of conducting adult education groups in home economics.

**445 Current Developments in Home Economics Education (4)**

Prereq: 340 or 443. Current trends and developments in home economics education programs at secondary and post high school levels in relation to curricular developments, evaluation procedures, legislation affecting program, and research.

**450 Problems in Teaching Home Economics (2-4, max 6)**

Prereq: 26 hrs. Individual problems in teaching.



**452 Home Management for the Disabled Homemaker (4)**

Recognizes unique home management demands faced by persons with disabilities and their families and determines creative method and identifies resources to meet those demands. No credit if HS 452 has been taken.

**453 Functional Assessment in Independent Living (3)**

Explores functional assets and limitations of persons with disabilities in completing household tasks. Identifies methods and materials used in assessment of functional limitation, and determines resources and strategies to increase ability of clients to perform household tasks. No credit if HS 453 has been taken.

**492 Household Equipment Techniques (3)**

Prereq: 391. Critical analysis of home equipment relative to durability and effective use. 1 lec, 4 lab.

**499A Field Work in Home Economics — Extension and/or Business (5-12)**

Prereq: 18 hrs. sr rank, perm. On-the-job training through cooperation with business organizations, department stores, radio and television stations, and Home Economics Extension Department of Ohio State University.

**499B Field Work in Home Economics — Job Training (5-12)**

On-the-job training in area of specialization.

**499C Field Work in Home Economics — Independent Living (5-12)**

(arranged) Provides supervised, practical experience in independent living rehabilitation setting in which students will assume responsibility for partial caseload of clients under supervision of faculty member and professional in field of independent living. No credit if HS 499C has been taken.

## Food and Nutrition (HEFN)

**110 Introduction to Hospitality (3)**

Prereq: none. (fall) Overview of restaurants, institutional food service, hotels, and travel and tourism. Exploration of different career possibilities in the hospitality industry.

**120 Meal Management (3)**

Prereq: home ec. major. (fall) Principles of food preparation and nutrition emphasizing use of time, energy, and resources in management of meals. Government regulations controlling food supply. 2 lec, 1 lab.

**128 Introduction to Nutrition (4) (2A)**

Nutrients, their food sources and functions in body, application to planning adequate diet through life cycle.

**222 Food Science and Principles (4)**

Prereq: 120 or perm. (winter) Scientific principles applied to selection, storage, and preparation of foods. 3 lec, 2 lab.

**232 Infant and Child Nutrition (4)**

Prereq: HECF 160 or equiv. Dietary factors related to nutritional status in pregnancy, infancy, preschool, and school-age children. Contribution of nutrition education and school lunch program in school curriculum.

**299 Sophomore Practicum — Professional Awareness (1)**

Prereq: 120, 128, INCO 101 or 103. (fall) Development of an awareness of the history, philosophy, goals, organization, and requirements of the profession of dietetics for sophomores who have declared their major in dietetics and community nutrition or nutrition with science.

**330 Food Sanitation and Safety (2)**

Prereq: none. (winter) Applied food service sanitation procedures in the food handling functions of purchasing, storage, preparation, and service. Upon completion, students will be eligible for National Certification in Food Safety.

**334 Quantity Food Production (4)**

Prereq: 128, 222. (fall) Food preparation principles applied to large quantity food production, menu planning, and service in institutions. Experience in residence halls. 2 lec, 4 lab.

**335 Food Service Purchasing (4)**

Prereq: 334. (spring) Managerial approach to the purchasing and selection of a wide variety of food, beverage, and non-food items.

Emphases placed on purchasing the optimal amount at the optimal price.

**382 Intermediate Nutrition (4)**

Prereq: 128. (winter) Focuses on application of basic principles and research findings relating to adequate nutrition throughout the life cycle.

**399 Field Experience—Food and Nutrition (5)**

Prereq: 110 or 299, food & nutrition major, jr rank, perm. (summer) On-the-job experience through cooperation with hospitals, community agencies, nursing care centers, restaurants, or hotels.

**400 Senior Seminar (1)**

Prereq: 299, food and nutrition major, sr rank, perm. (fall) Provides opportunity for students to demonstrate their personal professional growth by sharing experiences in verbal and written form with staff and fellow students.

**422 Experimental Foods (4)**

Prereq: 222, CHEM 301, 302. (spring) Factors which affect results of different methods used in food preparation. Research techniques using subjective and objective evaluation of products. 3 lec, 2 lab.

**426 World View of Nutrition (3)**

Prereq: 128, SOC 101 or ANTH 101. (winter) *P. Nemapare*. Survey of world food situation with consideration of environmental, cultural, governmental, and economic factors that relate to food production and consumption. Evaluation of these patterns in meeting dietary needs.

**427 Studies in Foods and Nutrition (2-4)**

Prereq: perm. Directed studies in some aspect of foods and/or nutrition; topics selected by students with approval of staff member; frequent conferences.

**428 Advanced Nutrition (4)**

Prereq: 128, CHEM 302, ZOOL 345 (fall) Biological aspects of nutritional science building on concepts in biochemistry and human physiology. Examination of present knowledge of nutrients, their utilization at the cellular level, and recommendations for intake compatible with good health. Experience in nutritional investigation is gained through study of experimental method.

**429 Community Nutrition (3)**

Prereq: 128, jr or sr rank. (spring) Assessment of community nutrition needs. Survey of agencies and programs providing services. Role of nutritionist. Methods and resources for nutrition education. Legislation.

**430 Therapeutic Nutrition (4)**

Prereq: 428, ZOOL 345, 463. (winter) Use of dietary modification in prevention and treatment of disease. Nutritional assessment. Problems in nutritional care.

**431 Studies of Science of Nutrition (3-4, max 8)**

Prereq: 428, biochemistry and human physiology. Nutrition as related to physiological and metabolic processes. Individual research project.

**437 Food Service Systems I (5)**

Prereq: 110 or 299, 334. (winter) *R. Neumann*. Introduction to tools and functions of management in food service with emphasis on organization structure, catering, inventory control, staffing, work methods, human relations skills, sanitation, and safety.

**438 Food Service Systems II (4)**

Prereq: 334, 399. (spring) Institutional equipment purchasing, kitchen layout design, facilities management, and cost control.

**439 International Cuisine (4)**

Prereq: 334, 437. (spring) Principles of international cuisine, advanced food preparation, and research of areas of specific interest. 2 lec, 3 lab.

**498A Nutrition Counseling (2)**

Prereq: 399, 428 or concurrent with, food & nutrition major. (fall) Nutrition counseling process and skills including assessment, treatment, and evaluation for follow-up in ambulatory care.

**498B Food Service Professional Development (2)**

Prereq: 110 or 299, and food service major. (fall) Professional experience for food service majors with opportunities for career assessment. Practice in interviewing and job-seeking skills.

**499A Nutrition Counseling Practicum (3)**

Prereq: 399, 428 or concurrent with, food & nutrition major. Nutrition counseling practicum including assessment, treatment, and evaluation for follow-up in ambulatory care.

**499B Food Service Practicum (3)**

Prereq: 110 or 299, and food service major. Hands-on food service experience at a food service establishment.

**General Home Economics (HEG)****459 Home Economics Seminar, Workshop and Short Course in International Service (2-4)**

Prereq: jr rank, perm. Special seminar or workshop for international students or for home economics majors who want to prepare for international service.

**479A-K Workshop in Home Economics (1-6)**

Prereq: none. Special workshops on topics related to home economics.

479A—Home Economics Education

479B—Clothing and Textiles

479C—Food and Nutrition

479D—Child Development

479E—Consumer Economics

479F—Interior Design

479G—Home Management

479H—Household Equipment

479K—Family Life Education

**490A-D Independent Study (2-5, max 10)**

Prereq: perm. Independent study, advanced level under direction of faculty member in area of specialization.

490A—Family Studies and Community Services

490B—Food and Nutrition

490C—Interior Design

490D—Textiles and Clothing

**Interior Design (HEID)****180 Introduction to Residential Design (3)**

Practical and aesthetic study of residential design, including design theory, materials and finishes, selection, and arrangement of furniture and accessories.

**181 Color Theory (4)**

Prereq: IT 104, concurrent w/IT 104, or perm. Lecture/studio focusing on the characteristics, relationships, and theories of color based on major color systems. The visual and psychological effects of color and light, various color phenomena, and the formal and expressive elements of color for interior environments are explored. Color is studied in terms of furnishings and finishes as related to space, form, and light.

**279 Rendering and Presentation Techniques (4)**

Prereq: concurrent w/280, or perm. A studio/lecture course emphasizing the rendering of texture, light, shadow, materials, and interior architectural details. Techniques include perspectives, elevations, isometrics, and sketching in various color and black and white media. Final presentation techniques, such as logo development, lettering styles, and point size, are stressed.

**280 Interior Design Studio I (4)**

Prereq: IT 105, HEID 180, concurrent w/HEID 279. Planning, designing, and specification of materials and furnishings for residential spaces. Lab experiences include executing plans, elevations, sample boards, cost estimates, rationales, and oral presentations.

**281 Interior Design Studio II (4)**

Prereq: 280. Investigation, design, and specifications of materials and furnishings for retail interiors of a large scale size. Lab experiences include executing circulation plans, floor plans, elevations, details, perspectives, lighting, rationales, and oral presentations.

**282 Interior Design Studio III (4)**

Prereq: 281. Design and development of construction, working drawings of an existing real building space, including plans, sections, details, schedules, and specifications. Lab experiences include measured drawings, client interview, and preparation of contracts and documents.

**288 Lighting Fundamentals (3)**

Prereq: Interior design major or perm. Fundamental concepts of illumination. Examination of vision, light, color, tasks, and quality of light. Terminology, symbols, concepts, basic equations, and lighting calculations. Exploration of light sources and controls. Study of physiological and psychological considerations.

**299 Professional Practices (2)**

Prereq: Interior design major or perm. Study of field of interior design concentrating on career opportunities and professional organizations.

**340 Interior Design Computer-Aided Design (3)**

Prereq: 282. Investigation and development of design using computer-aided design program (CAD). Lecture and lab experience, floor plans, furniture placement, 3-D views, and plotting using computers.

**350 Principles, Materials, and Methods of Interior Construction I (3)**

Prereq: IT 104, 105. Taught concurrent with 280. Investigation of interior construction materials and their application. Lectures on building types, codes, wood, plywood, doors, flooring, cabinets, detailing, steel studs, gypsum products, hardwood, and paint. Field trips to actual construction sites.

**351 Principles, Materials, and Methods of Interior Construction II (3)**

Prereq: 350. Taught concurrent with 281. Investigation of construction materials and their application. Lectures on concrete, masonry, ceramic tile, resilient floors, carpet, vinyl wallcovering, acoustic tile, window coverings, glass, fireplaces, solar design, and handicapped accessibility. Field trips and product representatives included.

**352 Business Procedures and Contract Documents (3)**

Prereq: 351. Taught concurrent with 282. Investigation of construction materials, systems, and procedures. Lectures on working drawings, detailing, HVAC, electrical, plumbing, specifications, contract documents and agreements, construction procedures, and shop drawings. Visits to actual construction sites.

**384 Interior Design Programming and Environmental Studies (3)**

Investigation of housing alternatives; including the psychological concept of personal space, crowding, territoriality, and privacy with a focus on design programming.

**389 Lighting Design and Application (3)**

Prereq: 288, jr rank or perm. Application and design of interior illumination systems. Use of manufacturer product catalogs and data. Consideration of special lighting applications. Further study of light quality and color effects. Use of lighting formulas and calculations.

**400 Senior Seminar — Professional Evaluation (1)**

Prereq: concurrently with 499. Provides opportunity for students to demonstrate personal growth by sharing experiences in verbal and written form to staff and fellow students.

**480 History of Furniture and Interiors (3)**

Prereq: jr rank or perm. Qualities and styles of furniture and furnishings. Emphasis on periods of past and their aesthetic influence on present.

**481 Contemporary Design in Furnishings (3)**

Prereq: jr rank or perm. Furnishings and interiors of present era; factors that have influenced development of contemporary design; important designers and their work.

**482 The Decorative Arts (3)**

Prereq: 480, or perm. Investigation of development of design in glass, mirrors, ceramics, textiles, rugs, metals, wallpaper, paintings, drawings, and prints. Historic and contemporary use of decorative arts.

**483 Advanced Interior Design Studio I (4)**

Prereq: 282. Investigation, design, and specification of materials and furnishings for offices. Office design will range from single-occupancy office, to large multi-purpose office space, including concept of office landscaping. Lab experiences include executing plans, elevations, perspectives, cost estimates, rationales, and oral presentations.

**484 Advanced Interior Design Studio II (4)**

Prereq: 282. Investigation, design, and specification of materials and furnishings for motels and restaurants. Experiences include executing plans, elevations, perspectives, cost estimates, rationales, and oral presentations.

**485 Advanced Interior Design Studio III (4)**

Prereq: 282, sr rank, interior design majors only. Investigation, design, and specification of materials and furnishings for a selected problem. Lab experiences include executing plans, elevations, perspectives, cost estimates, rationales, and oral presentations.

**499 Field Work — Interior Design (5-12)**

Prereq: 18 hrs, sr rank, perm. On-the-job training through cooperation with residential and contract firms for interior design majors. Concurrently with 400.

## Textiles and Clothing (HETC)

**117 Textiles and Dress and the Environment (3)**

Prereq: PSY 101 or SOC 101 or concurrently. Contemporary uses and roles of textiles and clothing as affected by economic, cultural, social, and psychological forces.

**213 Design Analysis: Theory and Principles (4)**

Prereq: soph rank, 117, Tier I math. Fundamental principles as applied to understanding use and fit of commercial pattern, and apparel construction. Emphasis on scientific thought, creative expression, and construction problems. 2 lec, 4 lab.

**299 Sophomore Practicum — Professional Assessment (4)**

Prereq: 117, soph rank, perm. (fall) In-depth study of career opportunities and job responsibilities; assessment of personal and professional assets and needs. On-the-job mini-experience related to career option.

**312 Studies in Clothing and Textiles (2-4, max 8)**

Prereq: perm. Selected topic in clothing and textiles.

**313 Design Analysis: Experimental (4)**

Prereq: C or better in 213. (fall) Problems, construction techniques, and evaluation of apparel design. Creative expression through experimenting with commercial patterns and fashion fabrics.

**315 Elementary Textiles (4)**

Prereq: Tier I math, soph rank. Properties and processing of fibers, yarns, fabrics, dyes, and finishes, with emphasis on consumer use. 3 lec, 1 lab.

**316 Design Analysis: Tailoring (4)**

Prereq: C or better in 213. Advanced problems with emphasis on couture tailoring techniques related to apparel construction. 2 lec, 4 lab.

**318 Fashion Merchandising — Promotion (4)**

Prereq: 213, 315, JOUR 250 or perm. (fall) Factors influencing planning, promoting, presenting, and selling of fashion goods. Study of store image development, layout, and visual presentation techniques. Development of marketing problems including alternative promotional techniques and cost control.

**355 Intermediate Textiles (4)**

Prereq: C or better in 315, CHEM 121. Continuation of 315, Elementary Textiles. Focus on chemical and physical structure of fiber forming polymers as they affect the performance properties of textile products. Relationships between applications in textile and apparel manufacturing and retail settings discussed.

**399 Junior Practicum — Professional Development (3)**

Prereq: 299, jr rank, perm. (winter) Job-seeking skills, company review, issues in professional development. Mini-professional experience.

**400 Professional Evaluation (1)**

Prereq: 399, concurrently with 499, fashion merchandising majors only. (arranged) Provides opportunity for students to demonstrate personal and professional growth by sharing experiences in verbal and written form to staff and fellow students.

**405A History of Costume (4)**

Prereq: jr rank. (winter) Costume through ages as reflection of historical period and source for present-day design.

**405B History of Textiles (2)**

Prereq: 315 or perm. (spring) Textiles through ages as reflective of historical period and source for present-day design.

**407 Textiles and Fashion Industries (4)**

Prereq: sr rank, jr English, C or better in 315. (winter) Economic factors influencing textile and fashion industries treated in depth.

**415 Design Analysis: Flat Pattern (4)**

Prereq: C or better in 213, 315 or perm. Creative apparel design and interpretation with emphasis on flat pattern manipulation.

**416 Design Analysis: Draping (4)**

Prereq: 213, 313, 415, or perm. Designing of apparel using draping techniques. Emphasis on fabric as medium rather than pattern development in design process.

**417 Fashion Merchandising — Management (4)**

Prereq: jr rank, 315, CS 120, or equiv. Marketing and management principles related to buying and controlling of merchandise. Emphasis on organizational structure, personnel management, planning, buying, and controlling merchandise assortments. Retail mathematics problems included.

**418 Textile Testing (4)**

Prereq: sr rank, CHEM 123, C or better in 315. (spring) Principles, techniques, and standard testing methods for textiles and clothing. Lab sessions will emphasize standard textile testing procedures and research methods.

**419 Studies in Textile Testing (3)**

Prereq: perm. Individual research and lab testing of problems in advanced textiles.

**420 Fashion Study Tour (2-3)**

Prereq: jr rank or perm. (spring) Directed study problems related to textile and apparel industry in conjunction with on-site tours of textile and apparel market centers.

**437 Strategic Merchandise Planning (4)**

Prereq: C or better in 417. Advanced use of spreadsheets and merchandise mathematics incorporated into computer simulations of various merchandising techniques. Topics include assortment planning, buying, personnel management, and inventory control.

**454 Clothing for Persons with Special Needs (3)**

(spring) Dressing techniques and functional design alternatives available to further assist independence of individuals with special needs. Focus given to populations such as elderly, physically or mentally disabled, and temporarily or permanently disabled. No credit if HS 454 has been taken.

**499 Field Experience — Textiles and Clothing (12)**

Prereq: 18 hrs, including 117, 213, 315, 318; MKT 301, JOUR 250; perm. On-the-job experience through cooperation with industry and/or retail establishments. For fashion merchandising majors only.

## HUMAN RESOURCE MANAGEMENT

**420 Human Resource Management (4)**

Prereq: MGT 300 or perm. Survey of human resource management practices in areas of human resource planning, recruitment, selection, training and development, performance appraisal, compensation, discipline, safety audits, and personnel research. Includes applications in employment law and discussion of interface of line and staff responsibilities in organization.

**425 Labor Relations (4)**

Prereq: 420 or perm. Study of labor-management relationships, organization campaigns, contract negotiations, grievance procedures, arbitration, and mediation and conciliation. Case studies and class exercises used extensively.

**430 Compensation (4)**

Prereq: 420, QBA 201 or INCO 301, or perm. Advanced study of human resource management function of compensation administration. Topics include job analysis, job evaluation, compensation surveys, pay structure design and implementation, benefits administration, and incentive programs.

**440 Human Resource Training, Development, and Research (4)**  
Prereq: 420, QBA 201 or INCO 301, or perm. Advanced study of human resource management functions of employee training and development and personnel research. Topics include new employee orientation, training needs analysis; training program design, implementation, and evaluation; applied personnel research methods; and costing human resource programs.

**450 Recruitment, Selection, and Appraisal (4)**

Prereq: 420, QBA 201 or INCO 301, or perm. Advanced study of human resource functions of recruitment, selection, and performance appraisal in organizations. Topics include recruitment planning and strategy, predictors for employee selection, criteria for evaluating job success, validation strategies, equal employment opportunity and affirmative action programs, and design and administration of employee performance appraisal systems.

**460 Human Resource Policy,**

**Planning, and Information Systems (4)**

Prereq: 425, 430, 440, 450, or perm. Advanced integrative course serving as capstone in study of human resource management. Students expected to apply their knowledge of human resource strategies, techniques, and constraints through cases, experiential exercises, and other projects. Role of human resource information systems as basis for planning and policy decisions discussed.

**491 Seminar (1-5)**

Prereq: perm. Selected topics of current interest in human resource management.

**497 Independent Research (1-4)**

Prereq: perm. Research involving some human resource management topic. Topic selection and study are under direction of faculty member.

**498 Internship (1-4)**

Prereq: perm.

## HUMAN SERVICES TECHNOLOGY

The following courses for the A.A.S. program in human services technology are available only on the Chillicothe campus.

**102 Introduction to Human Services Technology (3)**

Comprehensive introduction to knowledge and skills required for successful human services work. Topics include history and issues in human services, philosophical models, methods of service delivery, professional roles, and others.

**110 Human Services (3)**

Survey of the structure and functions of various human service agencies and programs. Program objectives and service delivery methods also will be described.

**125 Psychological Assessment (4)**

Prereq: PSY 101. Introduction to various assessment techniques used in human services. Includes interviewing and case history development in addition to psychological testing. Students will learn values and limitations of different assessment approaches. Ethical considerations also discussed.

**150 Behavior Management I (3)**

Prereq: PSY 101. Examines application of behavioral principles and techniques to various human problems. Emphasis on learning to objectively describe, measure, and analyze behavioral data. Ethical issues in behavior management discussed.

**151 Behavior Management II (4)**

Prereq: 150. Continuation of 150, exploring additional applications of behavioral techniques in both individual and group settings. Practice provided in contingency contracting and designing token economy.

**152 Behavior Management III (4)**

Prereq: 151. Continuation of 151 with emphasis on specific behavioral techniques such as progressive relaxation training and bio-feedback. Discussion of cognitive methods of behavior change. Course also attempts to integrate use of behavioral techniques with other intervention approaches.

**170 Group Dynamics I (4)**

Prereq: 102 and perm. Explores theories and issues current in group dynamics. Provides exercises to demonstrate applications of various theoretical positions. Also discusses methods for implementing groups and outcome evaluation.

**171 Group Dynamics II (3)**

Continuation of 170 with emphasis on participation in variety of group exercises. Students involved both as participants and group leaders. Critical feedback and evaluation provided through videotaped group sessions.

**200 Personal Management (3)**

Examines management of one's own behavior and positive relationship with others in social context. Emphasis on empathy and understanding through literature and/or other modes of communication.

**210 Practicum I (2)**

Prereq: 110 and perm. Students will participate in 150 hrs of supervised field experience at local agency or institution. Provides opportunity to gain practical training and experience under guidance and supervision of professional agency staff.

**211 Practicum Seminar I (1)**

Opportunity for group discussion of special topics and problems related to student practicum experiences and professional development. Enrollment concurrent with 210.

**220 Practicum II (2)**

Prereq: 210. Provides additional opportunities to develop helping skills and to practice techniques learned in class. Students may opt for more intensive experiences at same agency as 210 or select another from those participating with HST program. 150 hrs required.

**222 Practicum Seminar II (1)**

Opportunity for group discussion of special topics and problems related to student practicum experiences and professional development. Enrollment concurrent with 220.

**250 Practicum III (2)**

Prereq: 220. Emphasis of final 150-hr practicum on continued skill development and broadening of experience. Students who have completed 210 and 220 at same agency expected to select another for final practicum.

**255 Practicum Seminar III (1)**

Opportunity for group discussion of special topics and problems related to student practicum experiences and professional development. Enrollment concurrent with 250.

**275 Community Resources (3)**

Topics include basics of program planning; organizing community and local support for programs; researching potential funding sources. Development of grant writing skills including the areas of budget preparation and program evaluation.

**290 Special Problems (1-10, repeatable)**

Prereq: perm. Provides opportunity for students to explore topics of interest on individual basis, or in structured courses developed as common interests arise. Additionally, credits may be awarded for advanced practicum experiences.

## INDONESIAN

See Foreign Languages and Literatures.

## INDUSTRIAL TECHNOLOGY

**101 Engineering Drawing I (3)**

Basic theory and practice in engineering drawing. Topics include geometric construction, orthographic projection, dimensioning, and auxiliary, section, and pictorial views. Includes computer-aided drafting (CAD). 2 lec, 3 lab.

**102 Engineering Drawing II (3)**

Prereq: 101. Continuation of 101. Application of 3-D CAD software, including construction and application of 3-D wireframe models, detail and assembly drawings, geometric dimensioning and tolerancing (GDT), and fasteners. 2 lec, 3 lab.

**104 Architectural Drawing I (5)**

Prereq: Interior design major or perm. Basic techniques used in architectural drawing. Includes use of instruments, orthographic projection, floor plans, elevations, and sections. 5 lec.

**105 Architectural Drawing II (5)**

Prereq: 104 or perm. Continuation of 104. Includes pictorial drawing techniques; oblique, isometric, and perspective. 5 lec.

**110 Introduction to Manufacturing Processes (4) (2A)**

A survey of industrial materials and processes with applications to current manufactured consumer products. Emphasis is placed on generic processes such as forming and separating as applied to a variety of industrial materials. 4 lec.

**115 Metal Fabrication (3)**

Prereq: 110. Theory and practice of metal fabrication including cutting, forming, and joining of sheet metal and forms. 1 lec, 4 lab.

**117 Basic Metal Machining (3)**

Prereq: 101. Study and practical application of basic metal separating and machine tools used in manufacturing. Includes precision measurement and inspection. 1 lec, 4 lab.

**121 Descriptive Geometry (3)**

Prereq: 101 or perm. Theory and practical applications of graphic solutions of problems relating to points, lines, planes, and solids. Space visualization pertaining to intersections of planes and solids. 5 lec.

**150 Wood Technology (3)**

Prereq: 101, 110. A study of wood as an industrial material. Theory and practice of wood processing. 1 lec, 4 lab.

**201 Computer Graphics (3)**

Prereq: 101 or perm. Use of computer-aided drafting software to produce technical drawings. 1 lec, 4 lab.

**202 Technical Documentation (4)**

Basic theory and practice of developing and preparing various forms of technical documents including product specification, engineering proposals and change orders, and product manuals. Emphasis on computer-aided document preparation. Also includes study of document maintenance and control. 2 lec, 4 lab.

**215 Metal Casting (3)**

Prereq: 115, 150. Foundry theory and practice including pattern design through finished casting. 1 lec, 4 lab.

**217 Production Metal Machining (3)**

Prereq: 102, 117. Application of advanced and nontraditional metal separating processes including computer numerical control (CNC) and electrical discharge machining (EDM). Also includes quality control, time and cost analyses. 1 lec, 4 lab.

**220 Aircraft Powerplants (3)**

Prereq: Aviation or airway science major or perm, PHYS 202. Theory, operation, and maintenance procedures for typical aircraft powerplants. Lab experiences focus on maintenance and inspection of reciprocating engines, with reference to manufacturers' data and FAA regulations. 1 lec, 4 lab.

**221 Power Transmission (3)**

Prereq: 102, PHYS 201. Theory and practical applications of power and energy devices used in various applications. 2 lec, 2 lab.

**301 Industrial Ceramics (3)**

Prereq: CHEM 122. A study of ceramic materials with emphasis on production processes. 1 lec, 4 lab.

**308 Industrial Plastics (4)**

Prereq: 102, CHEM 122. Theory and practice of forming and producing plastic products. Includes various production processes. 2 lec, 4 lab.

**309 Plastics Tooling (2)**

Prereq: 308. A study of tooling required for extrusion, injection molding, compression molding, and other production processes. 1 lec, 2 lab.

**311 Welding (2)**

Prereq: 115. Theory and application of various types and positions of welding. Includes arc, shielded arc, oxy-acetylene, and spot welding. Analysis of results based on testing. 4 lab.

**318 Computer Numerical Control (3)**

Prereq: 217. A study of computer numerical controlled (CNC) machinery used in manufacturing. Includes part programming, tooling requirements, and actual machining. CAD/CAM applications will also be studied. 1 lec, 4 lab.

**320 Hydraulic Controls (3)**

Prereq: 221. Application of hydraulic principles to common industrial uses for power transmission and mechanism control. Includes a study of hardware and circuitry. 1 lec, 4 lab.

**332 Electronics I (3)**

Prereq: PHYS 202. Theory and applications of electricity and magnetism. Includes AC and DC analysis, passive electronic devices and their characteristics, principles of AC and DC machinery, and generation and distribution of AC power. 2 lec, 2 lab.

**333 Electronics II (3)**

Prereq: 332. Theory and application of basic electronic components and semiconductor devices, including DC power supplies, filter circuits, timers, oscillators, simple amplifiers, and other analog circuits. Also includes basic digital electronics, logic gates, and simple digital circuits. 2 lec, 2 lab.

**350 Furniture Production (4)**

Prereq: 101, 150. A study of materials and processes used in the production of furniture. 2 lec, 4 lab.

**351 Production Tooling (3)**

Prereq: 217. Theory and practice of designing and constructing tooling to improve productivity and quality in various manufacturing applications. 1 lec, 4 lab.

**361 Product Design (3)**

Prereq: 101. Study of stages in product design. Includes fundamental design, analysis, and simulation; design for manufacturability, reliability, standardization, and design communication. Lab activities emphasize use of computers in the design process. 2 lec, 2 lab.

**363 Quality Control (3)**

Prereq: MATH 250B. Theory and application of quality control principles and practices in manufacturing. Includes statistical process control (SPC). 3 lec.

**370J Public and Professional Writing (4)**

Prereq: jr rank. Preparation, organization, writing, and editing of professional topics for various audiences. Satisfies jr level English composition requirement. 4 lec.

**390 Industrial Materials (3)**

Prereq: 308. Advanced theory and application of common industrial materials. 3 lec.

**395 Industrial Work Experience (3-5, max 15)**

Credit for industrial work experience related to BSIT degree. Requires departmental permission, and credit is related to type of work and time worked.

**435 Digital Instrumentation and Controls (3)**

Prereq: 320, 333. A study of data representation and communication within and between computers and peripherals. Experiments using computers to control and monitor machines and processes in real-time. Includes a practical introduction to sensors, signal conditioning circuits, D-A and A-D conversions. 2 lec, 2 lab.

**452 Computer Integrated Manufacturing (3)**

Prereq: sr rank. Theory and application of computer technologies used in manufacturing. Includes computer integration of design, process control, production and inventory control, material handling, machine control systems, and communications. 2 lec, 2 lab.

**454 Automatic Identification (3)**

A study of methods and systems used to automatically identify objects. Various forms of keyless data entry will be studied; bar-coding, optical character recognition, voice/data entry, and other systems. Lab experiences will emphasize bar-coding technology. Various industrial applications will be studied. 2 lec, 2 lab.

**462 Product Manufacture (5)**

Development of a plan for manufacturing a product. Includes production planning and control, personnel requirements, cost considerations, and facilities requirements. 2 lec, 4 lab.

**464 Robotic Applications (3)**

Theory and practical applications of robots. Includes classifications, sensors and feedback mechanisms, and robot/computer communications. Lab activities emphasize on-line and off-line programming and setting up robotic cells. 1 lec, 4 lab.



**483 Industrial Safety (3)**

Prereq: sr rank or perm. A study of organized industrial safety programs, including historical and social perspectives. 3 lec.

**484 Maintenance Systems (3)**

A study of organized industrial maintenance systems. Includes environmental control, structural, mechanical, and electrical requirements. 3 lec.

**490 Special Investigations (1-4, max 4)**

Prereq: perm. Independent, concentrated study in a specific area under the direction of a faculty member. Requires permission of faculty member prior to registration.

**491 Special Topics in Industrial Technology (1-4)**

Prereq: perm. Selected topics that are current and relevant to industrial technology. May be repeated.

## INTERNATIONAL STUDIES

(Major code #4205)

The following courses are available through the Center for International Studies. Three are interdisciplinary courses focusing on Africa (INST 113), Asia (INST 103), and Latin America (INST 121). These courses, which provide an introduction to the regions, satisfy social science requirements, University General Education Tier II (Third World cultures) requirements, as well as major and certificate requirements. In addition, 80 faculty members in the various departments on campus teach over 150 courses each year that relate to Africa, Asia, Latin America, and Europe.

The Center for International Studies is responsible for the following interdisciplinary courses:

**103 Modern Asia (5) (2T)**

Introduction to history, cultures, and current problems of civilizations of Asia. Interdisciplinary survey dealing with China, Japan, India, and Southeast Asia (Burma, Thailand, Vietnam, Cambodia, Laos, Malaysia, Singapore, Indonesia, and Philippines).

**113 Modern Africa (4) (2T)**

Interdisciplinary introductory survey of Africa, its culture, history, and modern development. Disciplines included: anthropology, art, dance, economics, education, geography, history, linguistics, literature, and political science.

**121 Interdisciplinary Survey of Latin America (4) (2T)**

Introduction to Latin America through geography, politics, sociology, economics, literature, and art. Special emphasis given to 20th-century issues, problems, and developments.

**350 Focus on Malaysia (5)**

Introduction to geographical, historical, demographic, cultural and political settings of Malaysia within the wider context of Southeast Asia. A survey of the historical development of Malaysia with emphasis on the period from the Second World War.

**490 Tun Razak Seminar: Southeast Asia Studies (5)**

The Tun Razak Seminar is designed to enable the holder of the Tun Abdul Razak Chair to present his or her particular specialization. This means the content of the course could be different from year to year, depending on the discipline of the holder. The focus of the course will be on Malaysia as well as other parts of Southeast Asia.

## INTERPERSONAL COMMUNICATION

**101 Fundamentals of Human Communication (4) (2H)**

Introductory analysis of oral communication in human relationships with focus on variety of contexts including: dyadic, small group, and public communication experiences. Serves as survey of human communication processes. Mass lec.

**103 Fundamentals of Public Speaking (4)**

Prereq: 101 required for INCO majors only. Principles of public speaking, practice in presenting informative and persuasive speeches with emphasis on communicative process.

**104 Listening (4)**

Improvement of listening skills through intensive practice.

**205 Group Discussion (4)**

Prereq: 101 or 103. Study of structure and dynamics of small groups, nature and functions of leadership, group participation, problem solving, and decision making; frequent participation in group discussion activities.

**206 Communication in Interpersonal Relationships (4)**

Prereq: 101 or 103. Provides maximum experience in study of communication in social interaction. Exploration of communication variables, and skill development in message generation in 1-to-1 informal settings.

**215 Argumentative Analysis and Advocacy (4)**

Basic principles of argumentative discourse including concepts of presumption, burden of proof, rhetorical forms of reasoning, and evidence. Practice in applying these principles.

**217A Forensic Workshop — Debate (1-6)**

Prereq: perm. Intensive work in Intercollegiate Forensics Program. Students prepare for debate on contemporary issues. For credit, students must participate in 1 intercollegiate contest (3 hrs per qtr possible up to total of 12 hrs credit, no grade).

**217B Forensic Workshop — Individual Events (1-6)**

Prereq: perm, participation in O.U. Forensics Program. Students prepare for community appearances and tournament competition in oral interpretation, persuasion, informative, rhetorical criticism, extemporaneous, impromptu, and after-dinner speaking. For credit, students must prepare 2 events for at least 1 collegiate tournament (3 hrs per qtr possible up to total of 12 hrs credit, no grade).

**220 Oral Interpretation of Literature (4)**

Techniques of oral interpretation and development of adequate intellectual and emotional responsiveness to meaning of literature.

**234 Introduction to Communication Theory (4)**

Prereq: soph rank, 101, College of Communication major, or perm. Survey of selected humanistic and scientific approaches to communication studies. Emphasis on philosophical bases of communication theory.

**245 Introduction to Organizational Communication (4)**

Prereq: 234. Analysis of traditional and contemporary theories of communication in context of modern complex organizations (government, industry, education, etc.). Consideration and explication of such pertinent concepts and variables as message, channel, networks, information, information flow, communication climate, communication audit, etc.

**250 Introduction to Rhetorical Theory (4)**

Prereq: soph rank. Ancient and modern rhetorical communicative concepts and theories.

**297T Interpersonal Communication Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.

**298T Interpersonal Communication Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.

**299T Interpersonal Communication Tutorial (1-15)**

Prereq: Honors Tutorial College and perm.

**301 Empirical Research Applications in Communication (5)**

Prereq: MATH 113. Provides undergraduates with principles and basic skills necessary to criticize research literature; develops minimal proficiencies in structuring designs basic to descriptive and experimental studies, including data collection, analysis, and presentation techniques in communication research.

**315 Advanced Argumentation and Debate (4)**

Prereq: jr rank. Purpose of course is to familiarize student with argumentation, rhetoric, and communication skills used in legal process. Advanced argumentation and debate course with legal issues used as basis for arguments.

**342 Communication and Persuasion (4)**

Process of communication and attitude change, survey of general theories and typical research, and analysis of contemporary persuasion problems.

**351 Courtroom Rhetoric (4)**

Famous cases and methods of communication of masters of courtroom and judicial oratory. Cases, trials including Cicero, Strafford,



Charles I. Erskine, Hastings, Marshall, Webster, Darrow, Sacco-Vanzetti.

### 352 Political Rhetoric (4)

Rhetorical techniques found in political discourse are examined. Topics covered include symbolic politics, the place of myth in politics, and the political elements of film, literature, and television.

### 353 Contemporary Rhetoric (4)

Methods of communication of masters of period. Figures: Hitler, Mussolini, Lenin, Wilson, Churchill, Roosevelt, Kennedy, King. Movements: rhetoric of revolution, nationalism, fascism, socialism, communism, republicanism.

### 397T Interpersonal Communication Tutorial (1-15)

Prereq: Honors Tutorial College and perm.

### 398T Interpersonal Communication Tutorial (1-15)

Prereq: Honors Tutorial College and perm.

### 399T Interpersonal Communication Tutorial (1-15)

Prereq: Honors Tutorial College and perm.

### 401 Field Research Methods in Communication (5)

Prereq: 301 or perm. Discussion and application of communication data collection methods such as content analysis, participant observations, Q-analysis, questionnaire design, sampling procedures, case studies, and unobtrusive measures.

### 404 Principles and Techniques of Interviewing (4)

Prereq: jr rank. Methods used in 2-party, face-to-face oral communicative situations commonly encountered in organizational and professional environments. Intensive practice through role-playing and real-life interviews in and out of class, emphasizing skills involved in giving and getting information, persuasion, and job-employment situations.

### 405 Principles of Conference Leadership (4)

Prereq: jr rank, 205. Theoretical and methodological approaches to principles of group and conference leadership. Emphasis on leadership methods and skills as they apply to group and conference situations.

### 408 Health Communication (4)

Concerned with issues in theory and practice of health communication. Topics include provider-patient communication, organizational communication in health care delivery systems, communication in community/ consumer health education, information technologies in health communication, communication in support systems for the elderly, disabled, and terminally ill, and communication training for health care professionals.

### 410 Cross-Cultural Communication (4)

Prereq: jr rank. Analysis of processes and problems of communication as affected by national cultures: effects of differences in language, values, meaning, perception, and thought.

### 420 Gender and Communication (4)

Prereq: 101 or 206 or equiv. Explores variations in communicative behaviors related to biological sex and psychological gender. Examines female and male communication in intrapersonal, interpersonal, small group, public, and organizational settings.

### 421 Instructional Training and Development in Communication (5)

Provides upper level undergrad and grad preprofessional and professional training in development of interpersonal communication as human resource. Emphasis on application of communication skills necessary in organizational construct: education, business, professions, and governmental service.

### 422 Communication in the Family (4)

Prereq: 101 or 206, jr rank. Examination of the communication concepts basic to understanding interaction in the family. Provides a framework for analysis of family communication. Explores communication issues which relate to family interaction, including conflict, power, intimacy, and the development of relationships. Presents a model of effective communication in the family. Consideration of verbal and nonverbal communication behaviors.

### 430 Communication and the Campaign (4)

Prereq: 342. Theory and practice of persuasion and management in campaign situations (political, religious, information, fundraising, advertising, etc.). Students may participate in local, state, or national campaigns, or do an in-depth research paper.

### 433 Applications of General Semantics (4)

Chief formulations from general semantics and their applications to field of communication.

### 442 Responsibilities and Freedom of Speech in Communication (4)

Prereq: jr rank. Ethical and rhetorical implications of constitutional guarantees on political, social, and religious speech; analysis of effects of famous legal cases on freedom of speech.

### 445 Practicum in Organizational Communication (4)

Prereq: sr rank, mjr, 245, 301, or QBA 201. Message generation and analysis in simulated organizational environment; simulation of specific communication situations and problems student may encounter in professional career; opportunity to apply skills and theories.

### 452 Psychology of Speech (4)

Prereq: jr rank. Psychological principles active in communication such as concept-reference, meaning, vocal, verbal and nonverbal cues. Neuropsychological mechanism and socio-psychological-linguistic dimensions of speech examined.

### 470 Effective Classroom Communication for Teachers and Trainers (4)

Prereq: 1 yr teaching K-12. Course focuses on interpersonal communication in classroom environment, with particular emphasis on communication between students and teachers. Taught in workshop format only during summer session.

### 471 Nonverbal Communication for Teachers and Trainers (4)

Course focuses on the nonverbal behaviors used by students and teachers/trainers, and the impact of those behaviors on student/teacher relationships. Taught in workshop format only during summer session.

### 472 Organizational Communication for Teachers and Administrators (4)

Course focuses on the organizational communication variables that operate within the classroom, school, community, and state. Increases the abilities of teachers and administrators to understand and respond to the various organizational constituencies to which they are accountable. Taught in workshop format only during summer session.

### 497 Internship (1-15)

Prereq: perm. Systematic, supervised practical training and experience for INCO undergraduate students in selected professional environments.

### 497T Interpersonal Communication Tutorial (1-15)

Prereq: Honors Tutorial College and perm.

### 498 Independent Study (2-4, max 12)

Prereq: written proposal, perm. May be repeated for credit.

### 498T Interpersonal Communication Tutorial (1-15)

Prereq: Honors Tutorial College and perm.

### 499T Interpersonal Communication Tutorial (1-15)

Prereq: Honors Tutorial College and perm.

## ITALIAN

See Foreign Languages and Literatures.

## JAPANESE

See Foreign Languages and Literatures.

## JOURNALISM

### 105 Introduction to Mass Communication (4)

(2S)

All forms of mass communication including newspapers, magazines, radio-television, book publishing, public relations, advertising, and photojournalism. Begins with analysis of communication process and ends with media career opportunities.

**133 Precision Language for Journalists (4)**

Intensive drill in grammar, punctuation, syntax, and usage in contexts designed especially for future journalists. Extensive attention to media examples. Diagnostic tests during first week place each student to work at own level, whether very basic to prepare for beginning journalism courses or more advanced for those who already show considerable ability but would like to sharpen language skills for advanced courses.

**189 Journalism Workshop (1-4)**

Workshop on selected topics of journalism and mass communication. May be repeated to total 6 hrs of credit.

**221 Graphics of Communication (5)**

Prereq: majors only, or perm. Creative and practical aspects of typography, layout, and design of printed communication.

**231 News Writing (4)**

Prereq: typing proficiency and C or better in 133. Methods of gathering and evaluating news and writing typical news stories. Practice work covering assignments and preparing copy.

**233 Information Gathering (3)**

Prereq: 133. Gathering of information by journalists and other mass communicators from various sources, such as interviewing, use of libraries, government documents, computerized data bases, syndicated research, and business documents. Prepares communicators to conduct research and to assess and use material in media-related decision making.

**235 Picture Editing (3)**

Prereq: 221, 231. Principles and practices of picture editing. Includes consideration of picture sources, assignment, and handling; photographic technique and aesthetics; legal and ethical factors; visual idiosyncrasies of various media.

**250 Advertising Principles (4)**

Major factors in development of advertising programs.

**270 Introduction to Public Relations (3)**

Prereq: soph rank, PR or advertising major or perm. Provides an overview of the many facets of public relations, its history, development, practice, and application. Looks at the process of public relations, including the planning, implementation, and evaluation of public relations campaigns. Surveys techniques, strategies, and tactics used by public relations practitioners. Analysis of case studies.

**311 History of American Journalism (4)**

Prereq: major, or perm. Development of newspaper, magazine, and broadcast journalism from colonial period to present. Social, political, economic, and mechanical aspects.

**321 Print Advertising and Layout (4)**

Prereq: 221, 231, 250, and major, or perm. See title.

**323 Advertising Practice (2)**

Prereq: 321, perm. Lab work in preparing advertising for local advertisers.

**325 Photojournalism (3)**

Prereq: 231, or perm. Basic principles and practices of photojournalism for newspapers, magazines, and television. Includes consideration of roles of photographers and picture editors in communication and their relationships with other members of editorial team and mechanical departments of publications. Students shoot, process, and print pictures on assignment.

**326 Advanced Photojournalism (3)**

Prereq: 325, portfolio review, and perm. See title.

**327 Color Photography (3)**

Prereq: 326 and perm. Advanced course in photojournalism designed to give students working knowledge of color photography and processing.

**331 Reporting Contemporary Issues (3)**

Prereq: 231, jr or sr rank. Research, reading, and speech reporting on current social problems. Emphasis on analytical skills and ability to report in depth for mass audience.

**332 Reporting Practice (2)**

Prereq: 231, perm. Assignments at *Athens Messenger* in city and sports reporting, along with features.

**332B Reporting Practice (2)**

Prereq: 231. Assignments at Dept of Afro-American Studies in news and feature reporting about black community.

**332C Reporting Practice (2)**

Prereq: 231, perm. Class serves as University's Student News Bureau, writing stories about accomplishments of other University students for release to hometown newspapers. Students handle entire process, from generating ideas through mailing releases.

**333 News Editing (4)**

Prereq: C or better in 231. Copyreading, headline writing, news selection, and layout of news pages.

**334 Editing Practice (2)**

Prereq: 333, perm. Copyreading on *Athens Messenger*. Handling of local correspondence, wire copy, and working out make-up problems.

**336 Advanced Picture Editing (3)**

Prereq: 325, 335, and perm. Advanced course in picture editing designed to equip students with basic knowledge and working skills necessary for employment on newspaper or magazine picture desk.

**350 Radio Broadcast News (4)**

Prereq: 231. Intensive writing and reporting skills development for radio news broadcast.

**352 TV Broadcast News (4)**

Prereq: 350. Intensive writing and reporting skills development for television news.

**353 Broadcast News Practice (2)**

Prereq: 352, or perm. Preparation of news for broadcast. Students serve as assistants in newsroom of University's broadcasting stations or, by special arrangement and perm. in other stations.

**362 Community Newspapers (3)**

Prereq: 333, or perm. Editorial and business practices of suburban weeklies and dailies.

**363 Reviewing and Criticism (3)**

Prereq: 231, and major, or perm. Written criticism of fine and popular arts. Special role of critic who serves both as reporter and evaluator of artistic works for lay audience.

**370 Media Relations and Publicity (3)**

Prereq: 221, 231, 333: all C or better. Focus on publicity function of public relations and to skills in both public relations writing and media contact.

**375 Advertising Media Planning and Buying (4)**

Prereq: 250, jr rank or perm. Strategy, techniques, and problems of planning and buying media. Learning to buy space and time effectively and economically. Learning use of syndicated sources of media information.

**411 Newspaper and Communications Law (3)**

Prereq: C or better in 231. Principles and case studies in communications law, constitutional guarantees, libel, privacy, contempt, privilege, copyright, and government regulatory agencies.

**412 Ethics, Mass Media, and Society (3)**

Prereq: C or better in 411, or perm. Social responsibility of journalistic or other mass communicator. Professional codes, responsibility of media for social change, reaction to political and economic pressures.

**421 Graphic Production Processes (5)**

Prereq: 221, and perm. Advanced study of all processes for reproducing printed communication. Theory and lab.

**422 Advertising Production (4)**

Prereq: 221, 321, or perm. Techniques and problems in methods of advertising production.

**424 Direct Response Advertising (3)**

Prereq: 250, MKT 301, or perm. An introduction to the scope of direct marketing and direct response media, including direct mail, broadcast and print advertising, catalogs, co-ops, telemarketing, inserts, and videocassettes.

**430 Magazine Editing and Production (4)**

Prereq: 221, 233. Theory and techniques of magazine editing and production, including analysis of magazine industry and of specific magazines and audiences they serve. Editorial objectives and formulas, issue planning, article selection, layout, illustration, typography, printing, and distribution. Magazine project required.

**431 Magazine Production Practice (3)**

Prereq: 430, 441, retake with perm., maximum 9 hours. Practice course on E.W. Scripps School of Journalism's quarterly lab

magazine. Each student assigned specific responsibilities in magazine editing, production, advertising, and circulation.

#### **432 Specialized Business Magazines (3)**

Prereq: sr rank, or perm. Study in depth of professional, business, industrial, and technical magazines. Consideration of all types of publishing problems, usually as case studies.

#### **441J Magazine Feature Writing (4) (1J)**

Prereq: 333 or perm.; retake, different instructors. Writing and marketing factual magazine feature articles of various types. Finding subjects, securing photographs, writing articles, and surveying markets.

#### **442 Advanced Magazine Feature Writing (3)**

Prereq: 441. Writing and marketing magazine articles. Emphasis on specialized markets.

#### **443 Advanced Magazine Editing (3)**

Prereq: 431. Students edit real manuscripts, from how-to to personal narratives. They learn to recognize weaknesses, devise solutions, and interact with writers. Ethical dilemmas posed by more experimental forms of magazine journalism also are covered.

#### **450 Advertising Copy Writing (3)**

Prereq: 221, 231, 250, and advertising or PR majors, or perm. Effective persuasion in all media.

#### **452 Broadcast News Production (4)**

Prereq: 352. Principles and practices of radio and television news production. Emphasis on blending news judgement with production techniques and tools.

#### **455 Seminar in Broadcast News (3)**

Prereq: 350, 352. Discussion of problems —operational, social, economic, legal, and ethical — faced by broadcasters reporting public affairs.

#### **458 TV News Practicum (4)**

Prereq: 352. Practicum in preparation and presentation of TV newscast. Students select news material including video, format, and script for newscast, then deliver on air. Students will rotate through various newsroom positions during qtr.

#### **459 Advanced TV News Practicum (3)**

Prereq: 452, 458. Advanced practicum in preparation and presentation of TV newscast. Students involved in selecting, editing, scripting and formatting for on-air newscasts. Students also appear on air and assume management responsibilities.

#### **461 Specialized Journalism (3)**

Prereq: sr rank, and perm. Seminar approach to individual study of journalistic areas of special interest to individual students.

#### **462 Internship (3)**

Prereq: perm before beginning internship. Conference course for students who have completed internship with approved organization. Student will submit comprehensive report analyzing internship experience.

#### **464 Reporting of Public Affairs (3)**

Prereq: 333, sr rank, major, or perm. Problems of preparing in-depth, interpretive, and analytical reports on public affairs for mass media, with practice in writing such reports. Focus mostly on contemporary controversial issues.

#### **465 The Editorial Page (3)**

Prereq: 333, sr rank, major, or perm. Editorial page in opinion formation. Problems of content selection and presentation. Extensive writing of analytical and persuasive editorials and interpretive articles in depth.

#### **466 International Mass Media (4)**

Prereq: sr rank, and major, or perm. Development and operations of world mass communication channels and agencies. Comparative analysis of media, media practices, and flow of news throughout world. Relation of communication practices to international affairs and understanding.

#### **467 Foreign Correspondence (4)**

Prereq: sr rank, and 466, or perm. Role of foreign correspondent in news gathering. History, scope, techniques.

#### **468 Column Writing (3)**

Prereq: 231, 333, or perm. The study of newspaper columnists, past and present, with extensive writing of various kinds of columns.

#### **470 Sportswriting (3)**

Prereq: 231, 333, or perm. A look at sportswriting from lead to 30—the good, the bad, and the ugly of life in a sports press box.

#### **471 Public Relations Principles (5)**

Prereq: 333, sr rank, and PR major or perm. Public relations planning and techniques; selected communication studies and theories. Polling, defining objectives, and analysis of public relations messages.

#### **472 Advanced Public Relations (4)**

Prereq: 471, or perm. Planning public relations programs and projects, including selection of audiences, messages, and media, and evaluation of effects. Project in area of student's interest.

#### **475 Advanced Advertising Media Planning and Buying (4)**

Prereq: 250, 375, jr rank. Media theories appropriate in specific client advertising situations. Use of computer software for solving media problems. Review, creation, and testing of quantitative and qualitative media models, advanced work in media objectives, strategy, tests, and execution of media plans and evaluation.

#### **476 Advertising Research (4)**

Prereq: 250, sr rank. Original research in advertising, research methods and procedures, and syndicated/secondary research. Exploration and use of computing center to complete advertising research project.

#### **477 Media Sales and Promotion Management (4)**

Prereq: 250, 321, 482. Overview and professional projects concerning media sales and promotion management. Development of sales promotion plan and professional advertising sales presentations.

#### **481 Newspaper Management (3)**

Prereq: 333. Problems in publishing affecting all departments.

#### **482 Radio-Television Advertising and Management (4)**

Prereq: 221, 231, and 250, or perm. See title.

#### **483 Magazine Publishing and Management (3)**

Prereq: 430. An introduction for editors to audience, circulation, industry trends, repositioning, and launching of magazines. History of the rise and fall of publishing empires, including the financial, legal, and ethical realities that shaped them.

#### **484 Supervising School Publications (4)**

Prereq: 12 hrs or perm. Conference course for prospective advisors of school newspapers, yearbooks, magazines, and other publications. Purposes and functions, legal aspects, staff selection, content, copy, layout, production, printing, advertising, photography, business.

#### **485 Journalism in the Secondary School Curriculum (4)**

Prereq: 9 hrs of journalism. Intensive study and analysis of appropriate content for high school journalism courses. Planning course outlines and curricula.

#### **486 Advertising Campaigns (5)**

Prereq: 14 hrs advertising, advertising or PR major, and perm. Capstone course in advertising sequence to provide thorough understanding of basic elements of advertising campaigns. Includes creation of campaign.

#### **488 Humor Writing for Print, Broadcast (3)**

Prereq: jr or sr rank, perm. Theory and techniques of writing humor for newspapers, magazines, speeches, and other media.

#### **489 Journalism Workshop (1-4)**

Selected topics of journalism and mass communication, including newspapers, yearbooks, photojournalism, advertising, magazines, public relations, and publications advising. May be repeated to total 10 hrs of credit.

#### **490 Independent Study (1-4)**

Prereq: written proposal and perm. See title. May be repeated to 15 hrs credit.

#### **491 Research in Journalism and Communications (1-15)**

Prereq: perm.

#### **492 Seminar (1-4)**

Prereq: 333, sr rank. Selected topics of current significance. May be repeated with different topics to 12 hrs credit.

## LATIN

See Foreign Languages and Literatures.

## LATIN AMERICAN STUDIES

See International Studies.

## LAW ENFORCEMENT TECHNOLOGY

The following courses for the A.A.S. program in law enforcement technology are available only on the Chillicothe campus.

### 100 Introduction to Law Enforcement Technology (3)

Philosophy and history of law enforcement; overview of crime and police problems; organization and jurisdiction of local, state, and federal law enforcement agencies; survey of professional career opportunities and qualifications required.

### 110 Police Role in Crime and Delinquency (3)

Extent and distribution of crime and delinquency, with special emphasis on basic factors and conditions contributing to problem; some case study and evaluation of community resources in prevention field and detailed review of role of school, family, religious institutions, law enforcement agencies, courts, and correctional institutions. Part law enforcement agencies play in juvenile delinquency control, organization and functions of related juvenile agencies, laws governing handling of juvenile offenders, and brief resume of juvenile court and its jurisdiction.

### 120 Constitutional, Criminal, and Civil Law (3)

Study of U.S. constitution and amendments thereto by text material and case method system; major emphasis in freedom of speech, search and seizure, arrest and detention, interrogation and confession, self incrimination, right to counsel, double jeopardy, and due process situations.

### 130 Interviewing and Report Writing (3)

Examination of interviewing and interrogation procedures employed by law enforcement for obtaining information plus practical experience in use of methods. Mechanics of writing reports, including collecting information and taking statements, writing descriptive narratives, and report revision.

### 140 Introduction to Criminalistics (3)

Survey of systematic collection of evidence and potentialities and recommendations of applied science to criminal investigation. Includes demonstration of techniques utilized in processing criminal evidence and practical experience in selected crime lab methods.

### 150 Police Patrol Operations (3)

Focus on patrol function. Examination of purposes, methods, techniques, and types of patrol. Overview of support services, examination of various police services and public assistance, and analysis of deployment procedures and practices as related to overall mission of police patrol.

### 200 Procedures, Rules, and Test of Evidence (4)

Prereq: 120 or perm. Instruction designed to acquaint officer with court system in Ohio, its functions, authority, and duties. Explains workings of all courts of record and provides description of mayor's courts which are only courts not of record in State of Ohio. Kinds and degrees of evidence. Admissibility of evidence in criminal court cases, materiality and competency of evidence. Distinction between admissions and confessions; exceptions to hearsay rule; types of evidence.

### 210 Cybernetics (3)

Application and use of computers and/or automated systems for rapid storage and retrieval of information. Types of electronic data processing systems and their compatibility with contemporary police operations explored.

### 220 Court Procedures and Processes (3)

Case preparation, officer testimony and demeanor in court, effective preparation and presentation of criminal evidence, trial proce-

dures, utilization of written notes, and reaction to cross examination.

### 230 Police Community Relations (3)

Nature of relationships between police and various segments of community; racial and/or ethnic minorities, news media, clergy, and youth explored. Historical reasons for present dilemma and suggested changes to alleviate these problems.

### 240 Law Enforcement, Administration, and Supervision (3)

Prereq: 2nd yr law enforcement technology students or law enforcement personnel. Principles of law enforcement agency administration. Organization, planning and research, management, personnel management, training, and public relations. Administrative functions in vice control, crime delinquency prevention and control, patrol, investigation, communications, statistics, and records.

### 250 Vice and Narcotic Control (3)

Exploration of history, identification, and effects of narcotics. Narcotic and vice problem as it exists and penal statutes affecting control of narcotics and vice studied.

### 260 Criminal Investigation (3)

Fundamentals of investigation; crime scene search and recording; collection and preservation of physical evidence, scientific aids, *modus operandi*, sources of information, interviews and interrogation, follow-up, and case preparation. 3 lec, 2 lab.

### 270 Arrest, Search, and Seizure (3)

Prereq: 200. In-depth discussion of moral and legal obligations in use of police weapons. Includes legal provisions, safety precautions, and restrictions in use of firearms. Advanced theories and application, police combat shooting, all-weather firing, and new developments in police weaponry. Training for student in lawful methods of search and seizure and discussion of search of persons, places, and things, with emphasis on legality. Applicable court decisions and rulings presented and discussed. 3 lec, 2 lab.

### 280 Traffic Enforcement, Education, and Engineering (3)

Prereq: 102. Law relating to registration of motor vehicles, driver's license, Vehicle Code sections most often encountered and violated, regulation and traffic control, traffic accident investigation, traffic accident report forms; types and uses.

### 290 Special Problems (3)

Provides opportunity for students to explore topics of interest on individual basis, or in structured courses developed as common interest arises.

## LIBRARY SCIENCE

See Education — Curriculum and Instruction.

## LINGUISTICS

The requirements for a major in linguistics consist of 43 credit hours beyond 270; 33 hours must be in core linguistics courses, and 10 hours are to be chosen from other linguistics courses, with these courses clustered to form a concentration. Possible concentrations include teaching English as a second language, the use of computers in language teaching, sociolinguistics, psycholinguistics, and theoretical linguistics. In addition, courses in other departments in the social sciences, humanities, and communications will be recommended as external electives. Knowledge of a foreign language equivalent to two years of college-level study is required; study of a second foreign language is recommended. Transfer of credits from other programs or from other departments at Ohio University will be accepted upon approval of the department chair. Required core courses are the following: 275, 280, 350, 460, 470, 475, and 495.

A minor in linguistics requires a minimum of 25 hours, with at least two courses at the 400 level. Areas of specialization include general linguistics, sociolinguistics, and teaching English as a second language.

- 270 The Nature of Language (5)** (2S)  
Nontechnical introduction to basic nature of human language: its sound patterns, structure of words and sentences, nature of meaning, children's acquisition of language, animal communication, ways languages change, etc.
- 275 Introduction to Language and Culture (5)**  
Prereq: soph or above. Study of similarities and differences of language behavior in variety of cultural contexts.
- 280 Language in America (5)**  
Prereq: soph or above. Analysis of similarities and differences in language behavior in America, including dialects and immigrant languages.
- 350 Introduction to General Linguistics (5)**  
Prereq: jr or sr rank. Technical introduction to methods of language description, and survey of relationships and applications of linguistics to other disciplines.
- 370 Introduction to Psycholinguistics (4)**  
Prereq: 270 or 350 or perm. Study of linguistic behavior and psychological mechanisms responsible for it.
- 390 Language of Women and Men (3)**  
Prereq: jr rank or perm. American speech as used by women and men in terms of linguistic and social factors.
- 395 Introduction to Area Linguistics (3-5)**  
Prereq: perm. Investigation of linguistic characteristics of specific group or subgroup of languages within Malayo-Polynesian or African families.
- 440 Introduction to Bilingualism (5)**  
Prereq: 270 or 350 or perm. (winter) Introduction to bilingual theories from psychological, sociological, educational, and linguistic perspectives.
- 445 Instructional Materials in Bilingualism (5)**  
Prereq: 440 or perm. Creation and analysis of teaching materials in bilingual education.
- 451 Computers for Language Teaching I (4)**  
Prereq: 350 or perm. (fall) Introduction to uses of computers for language teaching, software selection, and creation of supplementary computer-assisted language learning (CALL) materials.
- 452 Computers for Language Teaching II (4)**  
Prereq: 451 and 480 or ML 445 or perm. (winter) Creation of CALL materials using authoring packages, authoring languages, or BASIC programming language.
- 453 Computers for Language Teaching III (4)**  
Prereq: 452 (spring) Development of CALL materials using speech synthesizer, interactive audio tape, video tape, or video disc player.
- 460 Phonology (5)**  
Prereq: 350 or perm. (fall) Introductory course in analysis of sound systems of natural languages.
- 470 Syntax (5)**  
Prereq: 350. (spring) Introduction to theory and application of grammatical analysis of natural languages.
- 475 Theories of Language Learning (5)**  
Prereq: 350. (winter) Introduction to theories of first and second language acquisition and their implications for language teaching methodology.
- 480 TEFL Theory and Methodology (5)**  
Prereq: 475. (winter) Second language teaching theory and methodology, with emphasis on teaching English as foreign language.
- 481 Methods and Materials in TESL (5)**  
Prereq: 475. (summer) Introduction to methods, techniques, and materials useful in the teaching of English in second language contexts and specifically in the public schools.
- 482 Materials in TEFL (5)**  
Prereq: 480. (spring) Theory and practice of analysis, evaluation, and creation of instructional materials for teaching English as a foreign language.
- 483 Testing in TESL (5)**  
Prereq: 480 or perm. (spring, summer) Evaluation and writing of language test items appropriate for measuring global competency and competency in specific skill areas. Entry and exit testing for public school ESL programs also discussed.

- 485 Historical Linguistics (5)**  
Prereq: 460, 470. (winter) Study of genealogical classification of languages, and of historical change in language systems.
- 490 Sociolinguistics I (5)**  
Prereq: 350 or perm. (fall) Observation and analysis of similarities and differences of language behavior in variety of linguistic and sociocultural contexts.
- 491 Sociolinguistics II (5)**  
Prereq: 490. Introduction to relationships between interlocking systems of language and social grouping.
- 495 Directed Research (3)**  
Prereq: perm. Independently directed project on a particular topic of interest in linguistics; required of all majors.
- 499 Special Studies in Linguistics (1-3)**  
Prereq: perm. Independent study of particular area of interest in linguistics.

## MALAYSIAN

See Foreign Languages and Literatures.

## MANAGEMENT

- 191 Workshop in Management (1-4)**  
Provides traditional and nontraditional students with specialized course offerings directed toward identified needs. Facilitates offering short courses, workshops, and institutes involving intensified instruction in pertinent management areas.
- 200 Introduction to Management (4)** (2S)  
Prereq: Not open to CBA students. Nature of managerial concept, managerial functions, and organizational structure, with emphasis on current issues.
- 300 Management (4)**  
Prereq: jr rank. Understanding of and practice in solving problems facing managers and administrators using concepts and principles from behavioral sciences and other applicable disciplines. No credit given to students who have completed 200. Students assumed to have background in economics, accounting, business law, and statistics equiv to ECON 103 and 104, ACCT 202, BUSL 255, and QBA 201.
- 325J Business Communications (4)** (1J)  
Prereq: jr-level Tier I English, jr rank. Introduction to basic concepts of organizational communication and practice with written communication forms (letters and reports). Brief consideration given to oral communication.
- 340 Organizational Behavior — Micro Perspective (4)**  
Prereq: jr rank. Conceptual framework of behavioral sciences to management and organizations. Motivation and leader behavior within organizational settings.
- 345 Organizational Behavior — Macro Perspective (4)**  
Prereq: jr rank. Organizational theory and behavior emphasizing formal organizational theory and work group behavior. Concentrates on interaction between organization, its environment and its members, and influences of informal work groups on member behavior.
- 428 Nonindustrial Labor Relations (4)**  
Prereq: jr rank and perm. Labor management relations problems and practices in nonprofit-making organizations such as government (city, county, state, and federal), educational institutions, charity and health care organizations. Covers such topics as relevant laws and regulations, administrative response to unionization attempts, contract negotiations, contract administration including grievance handling and arbitration through lectures, readings, and case analyses.



**430 Management Systems — Decision Making (4)**

Prereq: 300 or 200 or perm. Decision making and problem solving in organizations from managerial perspective.

**435 Management Systems — Information Handling (4)**

Prereq: 300 or 200 or perm. Focuses upon humans and machines as components of formalized information systems. Subject matter approached from systems and procedures viewpoint, with particular emphasis on management planning and control techniques.

**450 Managing Health Care Organizations (4)**

Prereq: 200 or 300. Develops conceptual tools for understanding health care management problems.

**480 Business Organizations — Change and Development (4)**

Prereq: MGT 340. Advanced study of the theory of internal change processes and organizational development within business organizations. Topics include role of the manager in the change process, need for change, systems analysis of the change process, identification of change processes, research considerations, use of internal vs. external change agents, and current trends.

**484 International Comparative Management (4)**

Prereq: sr rank. Survey and analysis of similarities and differences in management systems, processes, and styles, as well as evaluation of changes and their impact in selected groups of countries.

**491 Seminar (3, 4, or 5)**

Prereq: perm. Selected topics of current interest in management and organizational behavior area.

**492 Management Thought (4)**

Prereq: sr rank. Review of development of managerial theories from 5000 B.C. to present with consideration of their application to current organizational settings.

**494 Management Research (4)**

Prereq: 12 hrs of management courses. Practical application of research methods in behavioral sciences to management problems, emphasizing research available and its use in decision making and in solving managerial problems.

**497 Independent Research (1-4)**

Prereq: perm. Research in selected fields of management and organizational behavior under direction of faculty member.

**497H Independent Research (1-4)**

Prereq: 3.3 g.p.a., written proposal and perm. independent research. Course content selected by professor and student.

**498 Internship (1-4)**

Prereq: perm.

## MANAGEMENT INFORMATION SYSTEMS

The Management Information Systems (MIS) major is designed for students who want to combine training in business with an emphasis in computers and information systems. MIS majors will be prepared for entry-level positions in businesses which make extensive use of computers to support the operation of the business. Students are exposed to a wide range of hardware and software products and learn to apply them to a variety of business applications. This exposure is designed to give the student the ability to master new developments in computer technology quickly and to apply the new technology to appropriate business problems.

As an MIS graduate, a student will be able to communicate with both computer specialists and management professionals. Graduates develop an understanding of business problems as well as the computer technology used to solve those problems. MIS graduates are specifically trained to understand business applications and how computer technology can be applied to those applications.

**100 Introduction to Microcomputers (4)**

Introduces student to computer concepts within the framework of business applications. Students do computer assignments including word processing, spreadsheet analysis, and database applications, as well as readings in computer literature. No credit for both 100 and CS 120.

**220 Introduction to Business File Processing (4)**

Prereq: 100 or 200 or BMT 200 or CTCH 125. Students learn to write programs in VAXBASIC that process data stored in files to solve business problems. Applications are created on large computer systems. Structured programming is emphasized.

**225 Prototyping and Fourth Generation Languages (4)**

Prereq: 220. Students will learn how to write business applications using fourth generation languages to process data stored on microcomputers and larger computer systems. The class will focus upon prototyping as a systems development method made possible by the new languages. The advantages and shortcomings of prototyping applications will be examined.

**230 Advanced Microcomputer Spreadsheet Applications (4)**

Prereq: 100 or 200 or BMT 200 or CTCH 125. Advanced functions of spreadsheet programs will be examined. Groups of spreadsheet applications will be integrated to create systems designed to support common business functions.

**235 Advanced Microcomputer Database Applications (4)**

Prereq: 100 or 200 or CSB 200 or BMT 200 or CTCH 125. Relational database software will be used to create integrated data storage and retrieval systems. These systems will be used to solve business problems.

**240 Introduction to Business Applications of Artificial Intelligence (4)**

Prereq: CS 228 or equiv. Introduces the student to the role and potential value of artificial intelligence (AI) applications in business. Topics include the role of AI in decision making, modeling, and prototyping. A working knowledge of PROLOG is assumed.

**300 Business Information Systems (4)**

Prereq: 100 or CS 120 or equiv. Addresses issues that arise in dealing with management information as a business resource. As an introduction to the field of management information systems, topics covered deal with computer technologies, information development, and impact of information systems on business organizations at a variety of levels, from personal information systems to organization information architectures. Major attention is given to the implications of information systems for achieving competitive advantage.

**320 Business Systems I (4)**

Prereq: 225 or 330. First of a two-part series related to the development of computer information systems in business. This course looks at the planning and management of information systems development projects, along with tools for requirements analysis and evaluation of alternatives. Emphasis on prototyping and use of fourth generation languages. Begins a major project which will be finished in 490.

**325 PC LAN Applications (4)**

Prereq: 200 or 225. Introduction to networked computer systems. This class explores the costs and benefits of networking computers. Introduces topologies and some of the requisite hardware and software. Documents prepared on networked workstations will illustrate the possibilities of transferring formatted documents between workstations and between computer systems.

**340 Business Expert Systems (4)**

Prereq: 320 or 390. An introduction to the role of expert systems as a tool in business information systems. Emphasis on the place of expert systems in the systems development process. Representative expert system shells will be examined.

**350 Business Computer Hardware and Systems Software (4)**

Prereq: 325. Provides a detailed review of the architecture of business computing equipment and systems software (operating systems, editors, language translators, etc.). Information on the technical underpinnings of business computer information systems.

**380 Business Database I (4)**

Prereq: 320 or 390. This course will focus on the use of relational database technology in implementing business applications. The class will emphasize the concepts of database design and implementation and give students a chance to create their own databases.

**420 Business Systems II (4)**

Prereq: 380. Second of a two-part series on the development of computer information systems in business. This course looks at tools for design and implementation of computer information systems, along with testing and maintenance of systems. Project begun in 390 is completed.



**430 IBM COBOL (4)**

Prereq: 225 or 330. Deals with application of COBOL programming language to problems in marketing, finance, management, accounting, and economics.

**440 Applied AI in Management Information Systems (5)**

Prereq: 340. Course focuses on knowledge acquisition, knowledge representation, and the application of AI technology to aid in the solution of problems facing modern business. Expert systems shells and AI programming languages (Prolog, OPS5, etc.) will be re-examined for their ability (or inability) to interface with "traditional" systems development tools and to integrate into existing information systems.

**455 Distributed Systems (4)**

Prereq: 325. This class treats organization-wide networking, comparing the advantages and disadvantages of IBM's SNA, to DEC's DECnet, to PBX configurations. The class will emphasize Wide Area Network planning, with special attention to data administration policies and procedures. Distributed data processing applications will be developed.

**480 Business Database II (4)**

Prereq: 380. This course builds on the concepts learned in Business Database I. Students learn to use advanced database features in a lab-oriented environment. Applications will be written to solve business problems using the data stored in the database.

**491 Seminar (1-4)**

Prereq: perm. Selected topics of current interest in the management information systems area.

**492 Lab Assistant Seminar (1-15)**

Prereq: perm. Students assist instructors with advising of students in lab classes. Assistants must receive an A in the lab class to be eligible to serve as an assistant. One hour of credit is given for three hours of assistant work.

**495 Management Information Systems (4)**

Prereq: 380. This is the capstone course for MIS majors. It will focus upon ways in which information systems can be created to give competitive advantages to businesses. The class will emphasize the management of computing from a people and data perspective, demonstrating that computer-based systems are increasingly the principal tool of effective managements.

**497 Independent Research (1-4)**

Prereq: accepted proposal and perm. Research in selected fields in management information systems under the direction of a faculty member. Student must submit a proposal and have it accepted by a faculty member before taking this course.

**498 Internship (1-4)**

Prereq: 12 hours of MIS courses above 200 and /or perm.

## MANUFACTURING TECHNOLOGY

The following courses for the A.A.S. program in manufacturing technology are available only on the Lancaster campus.

**220 Basic Hydraulics (3)**

Prereq: PHYS 201. Application of hydraulic principles to common industrial control circuits. Emphasis on maintenance of hardware and circuitry. Field trips part of lab activity. 1 lec, 4 lab.

**221 Basic Pneumatics (3)**

Prereq: 220. Application of compressed air control systems to common industrial control circuits. Emphasis on maintenance of hardware and circuitry. 1 lec, 4 lab.

**261 Manufacturing I (Processes) (3)**

Comprehensive study of machine processes used in manufacturing with regard to their selection and plant layout requirements. Field trips part of lab activity. 2 lec, 2 lab.

**262 Manufacturing II (Inventory, Handling, Costing) (3)**

Prereq: 261 or perm. Inventory control, materials handling and production costs, storing and handling of materials before, during, and after manufacture. Field trips part of lab activity. 2 lec, 2 lab.

**263 Manufacturing III (Quality Control) (3)**

Analysis of basic principles of quality control. Includes statistical aspects of tolerance, basic concepts of probability, frequency distribution, sampling inspection, charts and gauges related to inspection. Field trips part of lab activity. 2 lec, 2 lab.

**264 Manufacturing IV (Scheduling) (3)**

Various established techniques of scheduling, analyzing, and improving production operations. Detailed study of applications of CPM scheduling. Introduction of PERT. Field trips part of lab activity. 2 lec, 2 lab.

**290 Materials (3)**

Prereq: CHEM 121 or perm. Applications of materials used in manufacturing and design. Metallic structure, alloys; heat treating; comparative properties of metals, plastics, and ceramics; processing effects; testing methods; coatings, lubricants, etc. 2 lec, 2 lab.

**299 Special Problems (1-3, max 9)**

Prereq: perm. Individual projects or internship experiences under supervision of faculty member in manufacturing option.

## MARKETING

The marketing major prepares students to become professional marketing personnel via available coursework in personal selling and sales management, marketing research and consumer behavior, and marketing analysis and management (national as well as international).

In addition to the B.B.A. degree requirements, a student majoring in marketing must complete 24 hours of marketing courses at the 300 or 400 level including 379 and 463.

**101 Consumer Survival in the Marketplace (4)**

How consumer can adapt himself or herself to modern marketing environment to optimize satisfaction derived from spending his or her money.

**301 Marketing Principles (4)**

Prereq: ACCT 201, jr rank. Principles of marketing management with emphasis on practices and problems of marketing manager; analysis of marketing environment; lecture supplemented with cases.

**302 Marketing Principles (4)**

Prereq: jr rank. Principles of marketing management with emphasis on practices and problems of marketing manager; analysis of marketing environment; lecture supplemented with cases. Students assumed to have background in economics, accounting, business law, and statistics equivalent to ECON 103, ECON 104, ACCT 202, BUSL 255, and QBA 201.

**303 Marketing Problems and Cases (4)**

Prereq: 301, preference to majors. Problems facing manufacturers and middlemen in marketing programs. Students will develop integrated marketing programs based on cases taken from actual business situations. Emphasis on development of analytical skills.

**358 Techniques in Personal Selling (4)**

Prereq: 301, marketing major or perm. Combines personal selling theory with actual practice. Students required to give sales presentations, interview professional sales representatives, analyze short cases, and produce final paper of complete sales presentation. Professional salespeople used as guest speakers to talk on current topics in area of sales.

**360 Marketing for Nonprofit Organizations (4)**

Prereq: 301 or perm. Focuses application of basic marketing principles on organizations which have objectives other than achieving profit. Topics include orienting products to clients, building communication flows with and motivating both internal and external publics, application of marketing research and segmentation analysis, identification of publics and analysis of needs.

**379 Marketing Research (4)**

Prereq: 301, QBA 201, and perm. Techniques involved in collection, tabulation, and analysis of marketing information.

**404 Management of Distribution (4)**

Prereq: 301 and ACCT 202, preference to majors. Problems encountered by manufacturer in establishing and maintaining effective

tive distribution system, concentrating on channel design and strategies.

#### 420 Services Marketing (4)

Prereq: MKT 301 and sr rank, or perm. This course reflects the increasing proportion of GNP taken up by the service sector. Included in course material will be the recreation industry, government agencies, financial institutions, professional (legal, medical) services, and other industries who do not sell a physical good as their main offering to the public. The course will consist of lecture, case work, and outside of class assignments. Students will be expected to analyze materials and write short reports.

#### 425 Industrial Marketing (4)

Prereq: 301, preference to majors. Investigation and analysis of problems involved in marketing of industrial products.

#### 441 International Marketing (4)

Prereq: 301, preference to majors. Marketing problems, opportunities, and organization of multinational firms to serve overseas markets. Government aids and impediments and comparison of markets and marketing techniques in U.S. and foreign countries.

#### 444 Consumer Behavior (4)

Prereq: 301 and QBA 201 or PSY 121 or equiv. Individual, social, and cultural influences that affect consumer behavior. Consideration of explanatory and predictive models.

#### 446 Sales Forecasting (4)

Prereq: 301. Forecasting techniques and methodologies applied to estimation of future environments in which business and marketing managers will have to operate.

#### 450 Management of Promotion (4)

Prereq: 301, preference to majors. Problem-solving course leading to development and management of firm's promotional mix with emphasis on use of mass media and on stimulation of reseller's cooperation.

#### 458 Sales Management (4)

Prereq: 301, preference to majors. Principles and practices in planning, organizing, and controlling sales force. Selection, training, compensating, supervising, and stimulating salespeople. Analysis of sales potentials and costs.

#### 461 Social Issues of Marketing (4)

Prereq: 301, preference to majors. Designed to increase awareness of future marketing managers of contemporary social issues and legal requirements of marketplace. Social critics, past and present, and their criticisms, including excessive promotion, unsafe and unnecessary products, high prices, and possible societal and governmental responses to these criticisms.

#### 462 Product Development (4)

Prereq: 301. Examination of new product development activities to identify significant factors to be studied and decisions required in researching, manufacturing, and marketing new products.

#### 463 Marketing Strategy (4)

Prereq: sr rank and marketing major with 16 hrs of marketing or perm. Analysis of preparation and organization of overall marketing plans and elements of marketing mix. Also developed are merchandising analyses, objectives, and strategies which take into consideration ever-changing consumer, trade, and legal environments.

#### 480 Mathematical Models of Marketing Analysis (4)

Prereq: 379, preference to majors. Quantitative techniques that can be used in analysis of marketing problems and application of these methods to problem situations.

#### 485 Advanced Marketing Research (4)

Prereq: 379 or perm. Continuation of beginning marketing research course with emphasis on topics not covered by 1st course. Example of topics, which is not inclusive: (1) statistical procedures and their marketing applications; (2) brand positioning and market segmentation using marketing research techniques; and (3) managerial cases which use marketing research as focus.

#### 491 Seminar (1-4)

Prereq: perm. Selected topics of current interest in marketing area.

#### 493 Readings (1-4)

Prereq: perm. Readings in selected fields of marketing. Topics selected by student in consultation with faculty member.

#### 497 Independent Research (1-4)

Prereq: perm. Research in selected fields of marketing under direction of faculty member.

#### 498 Internship (1-4)

Prereq: perm.

## MATHEMATICS

The requirement for the A.B. or B.S. degree major in mathematics is 50 quarter hours in courses numbered 200 or above, 16 hours of which must be chosen from courses numbered 306 and above (exclusive of 490 and 491), all taken for grade. Moreover, students seeking the B.S. degree must complete MATH 314 (or 413A) and MATH 360 (or 460A) as part of their 16 hours chosen from courses numbered above 306. The requirement for a minor in mathematics is 30 quarter hours in mathematics courses numbered above 200, including ten quarter hours of courses numbered 306 or above.

When planning any program of study in mathematics, it is strongly recommended that the student consult an advisor from the department.

A student wishing to study mathematics strictly from a mathematician's viewpoint, in specially designed courses, should inquire about our tutorial program. (Standard courses listed in the catalog are designed to serve many departments and purposes.)

A student studying mathematics with the view of eventually doing graduate work in mathematics is encouraged to pattern a program around the following suggested basic course selections: MATH 263 A, B, C, D, 306, 314, 340, 360, 411, 413 A, B, and 460 A, B, C. For more detailed information and recommendations, the student should consult the Special Curricula in the College of Arts and Sciences section of this catalog.

A student wishing to use mathematics training in business and industry may elect to pursue studies in applied mathematics. Such a course of study may terminate in a B.S. degree or be continued into graduate studies. For more detailed information and some example programs of study, the student should consult the Special Curricula in the College of Arts and Sciences section of this catalog.

A student preparing for teacher certification should seek a broad background in various areas of mathematics, including algebra, analysis, geometry, computer science, probability and statistics. In addition to the specified course requirements listed by the College of Education, suggested electives include: MATH 250B, 300, 306, 307, 314, 360, 406, 450A and 450B. Consult an advisor in the Department of Mathematics or College of Education for additional information.

Courses labeled 151 or below (with the exception of MATH 115, 116, or 118 when specified as a requirement for a major or taken as a prerequisite for MATH 263A) are not open for credit to students who have passed a mathematics course with a number higher than 151. MATH 113, 115, is a remedial sequence for 263A.

#### 101 Basic Mathematics (4)

Prereq: placement or perm. Fundamental course in arithmetic and elementary algebra for students with unusually weak backgrounds. Credit applies as hours toward graduation but meets no other college requirement. No credit to student who has passed higher-level mathematics course.

#### 113 Algebra (5) (1M)

Prereq: 2 yrs h.s. algebra, or placement, or 101. Review topics in high school algebra including linear and quadratic equations and inequalities, factoring, fractions, radicals and exponents, and simple graphing techniques. No credit to those with credit for 117.

#### 115 Pre-Calculus (5) (1M)

Prereq: 113 or 3 yrs h.s. math. Graphs, inverses, and operations of functions. Study of polynomial, rational, exponential, logarithmic, and trigonometric functions. Additional topics from trigonometry and analytic geometry. Recommended for students intending to enroll in the 263 calculus sequence.

#### 116 Analytic Trigonometry (2)

Prereq: 2 yrs h.s. algebra. Trigonometric functions and their properties, identities, equations, and applications. Available by correspondence and on some regional campuses. No credit to those with credit for 115 or 118.

#### 117 Elementary Applied Mathematics (4) (1M)

Prereq: 2 yrs h.s. algebra, or Tier I placement. Topics from intermediate algebra such as functions and graphs, systems of linear equations, 3x3 determinants, factoring, quadratic equations and inequalities, exponents and radicals, and logarithms. Available by

correspondence and on some regional campuses. Students cannot earn credit for both this course and 113.

**118 Elementary Applied Mathematics (4) (1M)**  
Prereq: 117 or 2 yrs h.s. algebra. Topics from trigonometry and analytic geometry including trigonometric functions and their graphs, vectors and oblique triangles, trigonometric identities, j operator, straight lines, conic sections, and translation of axes. Available by correspondence and on some regional campuses. Students cannot earn credit for both 118 and any of: 115, 116, or 130.

**120 Elementary Topics in Mathematics (4) (1M)**  
Prereq: 1 yr h.s. algebra and 1 yr h.s. geometry. 120-121-122 is a sequence for majors in elementary education and related fields. Emphasis of 120 is on number systems and related properties. 121 and 122 focus on topics related to elementary curriculum including geometry, algebra, statistics, and probability. Satisfies Tier 1 requirement for elementary education majors only. Does not apply to Arts and Sciences natural science requirements.

**121 Elementary Topics in Mathematics (3) (1M)**  
Prereq: 120. Continuation of 120. Does not apply to Arts and Sciences natural science requirements.

**122 Elementary Topics in Mathematics (3)**  
Prereq: 121. Continuation of 120-121. Does not apply to Arts and Sciences natural science requirements.

**130 Plane Analytic Geometry (3)**  
Prereq: 113, or equiv. May be taken concurrently with 116. Straight lines, circles, conic sections, functions, and graphing of functions studied. Available by correspondence and on some regional campuses. No credit to those with credit for 118.

**151 Mathematics: An Everyday Tool (4) (1M)**  
Prereq: 2 yrs h.s. math. Applications of elementary math to day-to-day problems. Special emphasis on consumer math such as compound interest, mortgages, and installment buying. Elementary probabilities and statistics with applications. Scientific calculator required. Does not apply to Arts and Sciences natural science requirement.

**163A Introduction to Calculus (4) (2N)**  
Prereq: 2 yrs h.s. algebra and placement, or 113. Presents survey of basic concepts of calculus. For students who want introduction to calculus but do not need depth of 263ABC. Note: Not open for credit to students who have credit for 263A. Students should not take 163A and/or 163B in preparation for 263A or 263B. Credit cannot be earned for both 263A and 163A.

**163B Introduction to Calculus (3) (2N)**  
Prereq: 163A. Continuation of 163A. Note: Not open for credit to students with credit for 263B.

**211 Elementary Linear Algebra (4)**  
Prereq: 113 or 4 yrs h.s. math. Solutions to linear systems, matrices and matrix algebra, determinants,  $n$ -dimensional real vector spaces and subspaces, bases and dimension, linear mappings, matrices of linear mappings, eigenvalues and eigenvectors, diagonalization. Emphasis is on techniques and computational skills. No credit to students who have completed 410 or 411.

**250A Finite Mathematics (4)**  
Prereq: 3 yrs h.s. math, or 113. Set theory; logic; vectors and matrices; linear programming. Not counted toward math minor or major.

**250B Finite Mathematics (4)**  
Prereq: 3 yrs h.s. math, or 113. Elementary probability and introduction to statistics. 250A not a prerequisite. Note: Not open for credit to students who have credit for 450A or ISE 304.

**263A Analytic Geometry and Calculus (4) (2N)**  
Prereq: 115, or 4 yrs h.s. math including trigonometry and analytic geometry, or perm of math department. Limits and differentiation, including trigonometric functions with applications. Students cannot earn credit for both 263A and 163A.

**263B Analytic Geometry and Calculus (4) (2N)**  
Prereq: 263A. Continuation of 263A. Integration, logarithmic, exponential, and other transcendental functions.

**263C Analytic Geometry and Calculus (4) (2N)**  
Prereq: 263B. Continuation of 263A-B. Integration techniques, indeterminate forms, improper integrals, infinite series, and polar coordinates.

**263D Analytic Geometry and Calculus (4)**  
Prereq: 263C. Continuation of 263A-B-C. Vectors, partial differentiation, and multiple integrals.

**297T Mathematics Tutorial (1-15)**  
(fall) Special program for students of unusual ability.

**298T Mathematics Tutorial (1-15)**  
Prereq: 297T. (winter) Continuation of 297T. See 297T for description.

**299T Mathematics Tutorial (1-15)**  
Prereq: 298T. (spring) Continuation of 297T and 298T. See 297T for description.

**300 History of Mathematics (4)**  
Prereq: math major, jr or sr rank. Survey of main lines of mathematical development in terms of contributions made by great mathematicians.

**NOTE:** Following 4 courses (306, 307, 314, 330) primarily intended for prospective mathematics majors to introduce them to some mathematical theory at an elementary level.

**306 Foundations of Mathematics I (4)**  
Prereq: 263A or 163B. An introduction to mathematical thinking and formal proofs. Topics include sets, relations, and functions.

**307 Introduction to Number Theory (4)**  
Prereq: 263A or 163B, 4 yrs h.s. math or equiv (306 recommended). Investigation of properties of natural numbers. Topics include mathematical induction, prime factorization, Euclidean algorithm, Diophantine equations, congruences, and divisibility.

**314 Elementary Abstract Algebra (4)**  
Prereq: 263A or 163B (306 recommended). Mappings, relations, definitions, and examples of groups, groups of rotations, cyclic groups, Lagrange's Theorem, fields, polynomials over fields.

**320 Teaching of Mathematics in Secondary School (4)**  
Prereq: 211, 330B, and jr rank. Orientation to professional mathematics education and topics related to teaching of mathematics on secondary school level. Not counted toward math major or minor.

**330A Foundations of Geometry (3)**  
Prereq: 263A or 163B. Introduction to axiomatic mathematics via 2 finite geometries and variety of interpretive models. Develops plane Euclidean and non-Euclidean geometries in rigorous fashion from modified Hilbert axiom system.

**330B Foundations of Geometry (3)**  
Prereq: 330A. Continuation of 330A. See 330A for description.

**333 Elementary Projective Geometry (4)**  
Prereq: 330 or perm. Topics in projective geometry.

**340 Differential Equations (4)**  
Prereq: 263D. Ordinary differential equations and related topics.

**343 Mathematical Modeling (4)**  
Prereq: 163A-B, and 250A-B, or perm. Construction and analysis of mathematical models and their use in investigation of physical, chemical, biological, social, and environmental problems. Models which use only elementary mathematical concepts stressed.

**360 Intermediate Analysis (4)**  
Prereq: 263D (306 recommended). Rigorous study of limits, continuity, and differentiability of functions of 1 real variable.

**397T Mathematics Tutorial (1-15)**  
(fall) Special program for students of unusual ability.

**398T Mathematics Tutorial (1-15)**  
Prereq: 397T. (winter) Continuation of 397T. See 397T for description.

**399T Mathematics Tutorial (1-15)**  
Prereq: 398T. (spring) Continuation of 397T and 398T. See 397T for description.

**406 Foundations of Mathematics II (4)**  
Prereq: 307 or 314 or 360. Introductory topics in set theory and axiomatic development of real number system.

**407 Number Theory (4)**  
Prereq: 307, 263C. Topics in number theory.

**410 Matrix Theory (4)**  
Prereq: 263D. Matrix algebra, determinants, solutions of linear systems, eigenvalues and eigenvectors, matrix functions and applica-

tions to differential equations. Jordan canonical form, inner products, diagonalization, and generalized inverses. Intended primarily for students interested in applied mathematics, engineering, and sciences.

**411 Linear Algebra (4)**

Prereq: 211 or 410. (fall) Vector spaces and linear transformations, characteristic values, quadratic forms, dual spaces, normal forms, and Jordan canonical form.

**412 Introduction to Algebraic Coding Theory (4)**

Prereq: 211. Encoding and decoding, vector spaces over finite fields, linear codes, parity-check matrices, syndrome decoding, Hamming and cyclic codes.

**413A Introduction to Modern Algebra (4)**

Prereq: 263C (314 or 411 recommended). (winter) Groups, permutation groups, subgroups, normal subgroups, quotient groups. Conjugate classes and class equation formula and its applications to p-groups. Fundamental theorem on homomorphisms.

**413B Introduction to Modern Algebra (4)**

Prereq: 413A. (spring) Fundamental theorem on finite abelian groups and its consequences. Cauchy theorem and first Sylow theorem. Polynomial rings. UFD and Euclidean domains. Maximal ideals. Algebraic extensions and splitting fields. Fundamental theorem of Galois theory.

**439 Topics in Geometry (1-5)**

Prereq: perm. When demand is sufficient, course in some phase of geometry will be offered under this number. May be repeated for credit up to 10 hrs.

**440 Vector Analysis (4)**

Prereq: 263D. Vector algebra and its applications. Vector calculus and space curves. Scalar and vector fields, gradient, divergence, curl, and Laplacian. Line and surface integrals. Divergence theorem. Stoke's theorem, and Green's theorem.

**441 Fourier Analysis and Partial Differential Equations (4)**

Prereq: 340 and 263D. Representation of functions as sums of infinite series of trigonometric functions, Bessel functions, Legendre polynomials, or other sets of orthogonal functions. Use of such representations for solution of partial differential equations dealing with vibrations, heat flow, and other physical problems.

**442 Theory of Linear and Nonlinear Programming (4)**

Prereq: 211 or 410, and 263D; computer programming experience is desirable. Minimization of functions subject to equality and inequality constraints. Kuhn-Tucker theorem, algorithms for function minimization, such as steepest descent and conjugate gradient and penalty function methods. (Not a course in computer programming.)

**443 Mathematical Modeling and Optimization (4)**

Prereq: 263D, 340, 211 or 410. Investigation of differential equation models of physical, social, and biological phenomena by qualitative analysis. Optimal criteria incorporated to convert models to optimal control problems. Pontryagin's maximal principle used to find analytic solutions. Numerical solutions to optimal control problems also treated.

**444 Introduction to Numerical Analysis (4)**

Prereq: 263D, 340, and CS 220. Polynomial interpolation and approximation; numerical integration and differentiation; numerical solution to differential equations; numerical methods for matrix inversion, determination of eigenvalues, and solutions of systems of equations.

**445 Advanced Numerical Methods (4)**

Prereq: 441, 444. (winter) Numerical methods for solutions of ordinary and partial differential equations (credit for only 1 of MATH 445 or ET 445).

**446 Numerical Linear Algebra (4)**

Prereq: 410 and CS 220 or equiv. Floating point arithmetic, numerical solution of systems of linear equations using Gaussian elimination and its variants, numerical techniques for eigenvalues, error analysis, and implementation of algorithms on computer.

**449 Advanced Differential Equations (4)**

Prereq: 340, and 410 or 411. Introduction to theory of ordinary differential equations with special attention to oscillation, plane autonomous systems, Liapunov theory, and quadratic functionals.

**450A Theory of Statistics (4)**

Prereq: 263D. (fall) Probability distribution of 1 and several variables; conditional probability and independence; moment generating functions; central limit theorem.

**450B Theory of Statistics (4)**

Prereq: 450A. (winter) Sampling theory, estimation of parameters, confidence intervals, analysis of variance, correlation, and testing of statistical hypotheses.

**450C Theory of Statistics (4)**

Prereq: 450B. (spring) Topics in statistics.

**451 Stochastic Processes (4)**

Prereq: 450B. Markov chains, Poisson process, birth and death process, queueing, and related topics.

**460A Advanced Calculus (4)**

Prereq: 360. (fall) Critical treatment of functions of single variable. Emphasis on topics not treated in 360, such as compactness, nested intervals, deeper properties of continuous functions, Riemann-Stieltjes integration, and uniform convergence.

**460B Advanced Calculus (4)**

Prereq: 460A. (winter) Primarily devoted to study of differential calculus in n-space. Topics include review of inner product spaces and linear transformations, elementary topology of plane, limits and continuity of functions of several variables, directional derivation, differential, chain rule, and implicit function theorem.

**460C Advanced Calculus (4)**

Prereq: 460B. (spring) Primarily devoted to study of integral calculus in n-spaces. Riemann-Darboux integral, Jordan content, iterated integrals, transformation of integrals, differential forms and their integrals.

**470 Applied Complex Variables (4)**

Prereq: 263D. Analytic and harmonic functions, Cauchy integral and residue theorems, contour integration, Taylor and Laurent expansions, conformality, and linear transformations with applications.

**480A Elementary Point Set Topology (4)**

Prereq: 360. (winter) Topology of Euclidean spaces and general metric spaces.

**480B Elementary Point Set Topology (4)**

Prereq: 480A. (spring) Introduction to general topological spaces.

**490 Selected Topics in Mathematics (1-5)**

Prereq: perm of instructor and chair. When demand is sufficient, course in some phase of mathematics will be offered under this number. (May be repeated for credit.)

**491 Studies in Mathematics (1-15)**

Prereq: 6 hrs of 400-level courses, sr rank or jr rank in Honors Tutorial College, or perm of chair and instructor. Selected topics in mathematics studied under guidance of instructor particularly interested in field. (May be repeated for credit.)

**497T Mathematics Tutorial (1-15)**

(fall) Special program for students of unusual ability.

**498T Mathematics Tutorial (1-15)**

Prereq: 497T. (winter) Continuation of 497T. See 497T for description.

**499T Mathematics Tutorial (1-15)**

Prereq: 498T. (spring) Continuation of 497T and 498T. See 497T for description.

## MEDICAL TECHNOLOGY

See Zoological and Biomedical Sciences.

## MILITARY SCIENCE (ARMY ROTC)

The Department of Military Science offers two programs of instruction leading to a commission as a second lieutenant in the

United States Army, the United States Army Reserve, or the Army National Guard. Military science is an elective program open to both men and women who are citizens of the United States.

The four year program consists of a basic course and an advanced course. The basic course requires successful completion of military science 100- and 200-level courses during the freshman and sophomore years. The advanced course requires successful completion of military science 300- and 400-level courses during the last two academic years. The courses are two credit hours each, with two hours of classroom instruction. During the advanced course there are approximately 20 hours of leadership laboratory each quarter. Additionally, all advanced course students must attend a six-week summer training camp. (See MSC 330 for complete camp description.)

No military obligation is incurred for the first two years of the program. Following completion of the basic course, qualified students are accepted for the advanced course by entering an ROTC contract which obligates the student to complete the program of instruction and accept a commission in the U.S. Army, U.S. Army Reserve, or the Army National Guard. Advanced course students receive a subsistence allowance of \$100 for each academic month of enrollment, not to exceed two years.

The two-year program is offered for students who transfer from colleges that do not offer ROTC, or students whose academic course load did not permit military science during their first two years. Students may qualify for the two-year program in one of several ways. The first is by attending Army ROTC Basic Camp, Camp Challenge, (see MSC 230 for complete camp description) and upon successful completion of camp the student may enter the advanced course. Attending basic camp does not require the student to continue in the program nor does it incur any military obligation. The second is by receiving credit for honorable prior military service of at least one year, as determined by the professor of military science. Additionally, a student may receive credit for two or more years of junior ROTC at the high school level. After receiving credit for the basic course, the student proceeds with the advanced course as previously described. Other options are available for selected situations or circumstances.

**Regional Campus Student.** Students at one of the five Ohio University regional campuses may participate in the two-year program by attending advanced course classes at the Athens campus. Special sections are offered on Fridays to enable students to attend class, leadership lab, and related activities.

#### 101 Introduction to Military Science (2)

Prereq: fr and soph. (fall) Broad overview of military science curriculum, to include role of Army office and career opportunities available to Army officer. Selected topics include rifle marksmanship, adventure training, U.S. forces deployment, and comparative military strength analysis.

#### 102 Military Skills (2)

Prereq: fr and soph. (winter) Provides student with broad understanding of selected basic soldier skills through reading, lectures, film, class discussions, and practical exercises. These skills are prerequisites for students to complete Army ROTC four-year program, applicable to both military and civilian occupation.

#### 103 Map Reading and Orienteering (2)

Prereq: fr and soph. (spring) Fundamental map reading and orienteering techniques with emphasis on development of land navigation skills. Instruction includes practical field exercises in orienteering.

#### 201 Adventure Training and Survival (2)

Prereq: fr and soph. (fall) Adventure training and survival course intended to present broad overview of wilderness survival techniques and adventure-type training skills.

#### 202 Leadership and Management (2)

Prereq: fr and soph. (winter) Interdisciplinary approach to study of organizational leadership; serves as major step in student's education in leadership process. Provides basis for understanding relationship of individual differences and leadership process, group dynamics and their relationship to leadership process, and impact of leader's behavior on leadership process.

#### 203 Selected Military Battles and Campaigns (2)

Prereq: fr and soph. (spring) Development of military art through analysis and evaluation of selected U.S. military battles and campaigns from American Revolutionary War through Vietnam. Specific battles and campaigns studied, with emphasis on application and influence of principles of war.

#### 230 Army ROTC Camp Challenge (4)

6-week summer off-campus training program that qualifies students for direct entry to advanced ROTC course. Transportation to and from camp, uniforms, meals, and housing paid for by Army.

#### 301 Introduction to Tactics (2)

Prereq: perm. (fall) Basic soldiering techniques emphasizing individual tactical training, organization of small military teams, and application of patrolling techniques.

#### 302 Squad Tactics (2)

Prereq: 301. (winter) Continuation of 301. Instruction deals with offensive and defensive tactics employed by infantry rifle squad. Emphasis on leadership responsibilities during conduction of tactical operations.

#### 303 Platoon Level Tactics (2)

Prereq: 302. (spring) Operational methods, leadership techniques, organization, weapons systems, and communication systems used in tactical employment of infantry rifle platoon. Emphasis on offensive aspects of military operations.

#### 310A Advanced Leadership Laboratory (0)

Prereq: enrollment in 301. (fall) Development of proficiency and leadership potential by participation in planning and conducting tactical training, drill and ceremonies, and other military subjects.

#### 310B Advanced Leadership Laboratory (0)

Prereq: enrollment in 302. Continuation of 310A. See 310A for description.

#### 310C Advanced Leadership Laboratory (0)

Prereq: enrollment in 303. (spring) Continuation of 310A-B. See 310A for description.

#### 330 Army ROTC Advanced Camp, Camp Adventure (4)

Prereq: 303. 6-wk field training session conducted at Army installation.

#### 401 The Contemporary Army Officer (2)

Prereq: 303. (fall) Introduction to profession of arms with emphasis on its characteristics and responsibilities. Discussion of military professional ethics and ethical decision making with illustration through use of case studies.

#### 402 Military Justice (2)

Prereq: 401. (winter) Orientation of military justice system as outlined within U.S. Uniform Code of Military Justice. Examines military law, discipline, behavior modification, and nonpunitive actions as management tools of a military leader.

#### 403 World Change (2)

Prereq: 402. (spring) U.S. in contemporary world scene. Includes study of other major actors in world arena.

#### 410A Advanced Leadership Laboratory (0)

Prereq: enrollment in 401. (fall) Practical experience as cadet officer in conduct of drill and ceremonies; training management, maintaining discipline; and demonstration of moral and range of factors which affect morale.

#### 410B Advanced Leadership Laboratory (0)

Prereq: enrollment in 402. (spring) See 410A for description.

#### 410C Advanced Leadership Laboratory (0)

Prereq: enrollment in 403. (spring) See 410A for description.

#### 490 Special Problems (1-5)

Prereq: perm. Provides continuing military education on individual basis. Provides advanced and specialized training depending upon needs of individual and department.

## MUSIC

### Applied Music

Fee for private instruction for all applied music (piano, voice, organ, strings, woodwinds, brass, percussion) is \$12 per quarter hour.

**NOTE:** A description of the proficiency requirements for applied music may be obtained from the School of Music.

**090 Performance Laboratory (0)**

Required each qtr of all undergraduate music majors.

**141 Class Piano (2)**

Prereq: perm. music majors only. *M. Stewart.*

**141A Class Piano (2)**

Prereq: perm for nonmusic majors. *G. Berenson.*

**142 Class Piano (2)**

Prereq: perm. 141, music majors only. *M. Stewart.* Continuation of 141.

**142A Class Piano (2)**

Prereq: perm. 141A, for nonmusic majors. *G. Berenson.* Continuation of 141A.

**143 Class Piano (2)**

Prereq: perm. 142, music majors only. *M. Stewart.* Continuation of 141 and 142.

**143A Class Piano (2)**

Prereq: perm. 142A, for nonmusic majors. *G. Berenson.* Continuation of 142A.

**147 Class Voice (2)**

Prereq: perm. music majors only. *M. Stephenson.* For students enrolling in beginning voice.

**147A Class Voice (2)**

Prereq: for nonmusic majors, perm. Beginning instruction in voice for nonmusic majors.

**148 Class Voice (2)**

Prereq: 147 or perm. *M. Stephenson.* Continuation of 147. See 147 for description.

**148A Class Voice (2)**

Prereq: perm. 147A, for nonmusic majors. (winter) Continuation of 147A. See 147A for description.

**149 Class Voice (2)**

Prereq: 148 or perm. *M. Stephenson.* Continuation of 147 and 148. See 147 for description.

**149A Class Voice (2)**

Prereq: 148A, for nonmusic majors. (spring) Continuation of 147A and 148A. See 147A for description.

**165 Class Folk Guitar (2)**

Prereq: music major or perm. *P. Coddling.* Introduction to guitar fundamentals including the playing of chords and melodies using varied systems of notation, basic strumming and finger-picking techniques, and tuning. Skill development in the use of guitar in vocal accompaniment and early solo work.

**165A Class Folk Guitar (2)**

Prereq: nonmusic major or perm. *P. Coddling.* See 165 for further description.

**166 Class Folk Guitar (2)**

Prereq: 165 or perm. *P. Coddling.* Continuation of 165.

**166A Class Folk Guitar (2)**

Prereq: 165A or perm. *P. Coddling.* Continuation of 165A.

**241 Class Piano (2)**

Prereq: music majors only, 143 with minimum grade of C, or perm. *M. Stewart.*

**242 Class Piano (2)**

Prereq: 241 or perm. for music majors only. *M. Stewart.* Continuation of 241.

**243 Class Piano (2)**

Prereq: 242 or perm. for music majors only. *M. Stewart.* Continuation of 241 and 242.

**244D Communiiversity Band (2)**

Prereq: perm or audition. A wide variety of music literature. Including marches, overtures, and musicals is studied and performed both on and off campus under both a permanent and guest conductor.

**249 Brass Choir (1)**

Prereq: auditon. *Staff.*

**251A Marching Band (2)**

Prereq: audition. *S. Young.*

**251B Wind Symphony (2)**

Prereq: audition. *R. Soctarelli.*

**251C University Band (1)**

Prereq: perm or audition. *Staff.*

**251D Varsity Band (1)**

Prereq: perm or audition. *R. Soctarelli.*

**252A Symphony Orchestra (2)**

Prereq: audition. *M. Thaker.*

**252B Chamber Orchestra (1)**

Prereq: audition. *M. Thakar.*

**253A University Singers (2)**

Prereq: audition. *P. Jarjstian.*

**253B Choral Union (1)**

Prereq: audition. *P. Jarjstian.*

**253C Opera Theater (1-4)**

Prereq: audition. *E. Payne.*

**253D Men's Glee (1)**

Prereq: audition. *I. Zook.*

**253E Women's Glee (1)**

Prereq: audition. *R. Wetzel.*

**254A Chamber Music, Strings (1)**

Prereq: strings only, perm. Participation in playing of standard string chamber literature.

**254B Chamber Music, Woodwinds (1)**

Prereq: perm. Participation in playing of standard woodwind chamber literature.

**254C Chamber Music, Brass (1)**

Prereq: perm. Participation in playing of standard brass chamber literature.

**254D Chamber Music, Percussion (1)**

Prereq: perm. Participation in playing of standard percussion chamber literature.

**254E Chamber Music, Contemporary (1)**

New music ensemble. Participation in performing contemporary chamber music for various ensembles of instruments and voices.

**254F Chamber Music, Piano (1)**

Prereq: perm. Participation in playing of standard piano chamber literature.

**255A Jazz Ensemble (1)**

Prereq: audltion. *E. Bastin.*

**255B Percussion Ensemble (1)**

Prereq: perm. *G. Remonko.*

**255C Trombone Choir (1)**

Prereq: perm. *R. Fink.*

**340 Voice (1-6)**

Prereq: music major, or perm for nonmusic majors. *N. Beebe, E. Payne, M. Stephenson, I. Zook.*

**341 Piano (1-6)**

Prereq: music major, or perm for nonmusic majors. *G. Berenson, E. Jennings, M. Stewart, R. Syracuse.*

**342 Harp (1-6)**

Prereq: perm. *L. Jennings.*

**342A Class Harp (1)**

Prereq: perm. *L. Jennings.*

**343 Organ (1-6)**

Prereq: perm. *J. Butler.*

**343A Harpsichord (1-4)**

Prereq: perm. *J. Butler.*

**344 Violin (1-6)**

Prereq: perm. *H. Beebe.*

**345 Viola (1-6)**

Prereq: perm. *H. Beebe.*

**346 Violoncello (1-6)**

Prereq: perm. *L. Conkling.*



**347 Double Bass (1-6)**

Prereq: perm. A. Laszlo.

**348 Flute (1-6)**

Prereq: perm. T. Peterson.

**349 Oboe (1-6)**

Prereq: perm. D. Conaty.

**350 Bassoon (1-6)**

Prereq: perm. H. Robison.

**351 Clarinet (1-6)**

Prereq: perm. D. Lewis.

**352 Alto Saxophone (1-6)**

Prereq: perm. A. Reilly.

**353 Trumpet (1-6)**

Prereq: perm. E. Bastin.

**354 Horn (1-6)**

Prereq: perm. J. Gerber.

**355 Euphonium (1-6)**

Prereq: perm. R. Fink, R. Smith.

**356 Trombone (1-6)**

Prereq: perm. R. Fink.

**357 Tuba (1-6)**

Prereq: perm. R. Smith.

**358 Percussion (1-6)**

Prereq: perm. G. Remonko.

**359 Class Piano (2)**

Prereq: 243 with minimum grade of C, or perm. M. Stewart.

**360 Class Piano (2)**

Prereq: 359 or perm. M. Stewart.

**361 Class Piano (2)**

Prereq: 360 or perm. M. Stewart.

**370 Practicum in Music (1-2, max 12)**

Prereq: perm. Provides practical experiences such as supervised private and/or small group teaching, seminars in instrument repair, small touring ensembles, and pit orchestra performance. May be repeated.

**372 Advanced Functional Skills (2)**

Prereq: jr level in piano or perm. (fall) Instruction to provide greater facility in handling basic functional keyboard skills. Emphasis on transferring these skills to actual situations encountered as music educators and/or music therapists.

**375A English Diction for Singers (1)**

Prereq: perm. Stresses using vocal repertoire, correct pronunciation for singing.

**375B Italian Diction for Singers (1)**

Prereq: perm. See 375A for description.

**375C German Diction for Singers (1)**

Prereq: perm. See 375A for description.

**375D French Diction for Singers (1)**

Prereq: perm. See 375A for description.

**450 Accompanying (1, max 3)**

Prereq: perm. Basic problems in accompanying vocalists and instrumentalists—rehearsal techniques, ensemble, pedaling, balance, etc. May be repeated.

**455 Conducting (3)**

Prereq: 203, 205. P. Jarjtsian and M. Thakar. Basic beat patterns, technique of baton, and use of left hand. Experience in conducting choral and small instrumental ensembles in works suitable for school groups.

**456A Instrumental Conducting (3)**

Prereq: 205, 455. R. Socciarelli. Experience in conducting from full score; includes band and orchestral works suitable for high school groups.

**456B Choral Conducting (3)**

Prereq: 205, 455. P. Jarjtsian. Specialized conducting techniques for choral groups, including experience in conducting works suitable for high school and college groups.

**457A Solo Repertoire of String Instruments (1)**

Prereq: 323, perm. Survey of student's major performance instrument literature.

**457B Solo Repertoire of Woodwind Instruments (1)**

Prereq: 323, perm. See 457A for description.

**457C Solo Repertoire of Brass Instruments (1)**

Prereq: 323, perm. See 457A for description.

**457D Solo Repertoire of Vocal Music (1)**

Prereq: 323, perm. (spring) See 457A for description.

**457F Solo Repertoire of Percussion Instruments (1)**

Prereq: 323, perm. See 457A for description.

**458A String Instrument Pedagogy (2)**

Prereq: perm. Teaching techniques of string instruments and use of selected materials for various levels of ability. Includes practical experience in teaching.

**458B Woodwind Instrument Pedagogy (2)**

Prereq: perm. See 458A for description—woodwind instruments.

**458C Brass Instrument Pedagogy (2)**

Prereq: perm. See 458A for description—brass instruments.

**458D Vocal Pedagogy (2)**

Prereq: perm. See 458A for description—voice.

**458E Class Piano Pedagogy (2)**

Prereq: perm. M. Stewart. Practical teaching techniques unique to class piano instruction, particularly in electronic lab. Examination of useful materials for various levels of ability. Includes some experience in classroom teaching.

**458F Percussion Instruments Pedagogy (2)**

Prereq: perm. See 458A for description—percussion instruments.

**458G Piano Pedagogy (2)**

(fall) Provides creative teaching strategies for piano teacher. Teaching philosophies, objectives, and procedures discussed and applied to group and private piano instruction. Includes teaching techniques for working with students of all ages and levels.

**458H Piano Pedagogy (2)**

Prereq: perm. (winter) Continuation of 458G. See 458G for description.

**458I Piano Pedagogy (2)**

Prereq: perm. (spring) Continuation of 458G and 458H. See 458G for description.

**497 Recital (1-2)**

Prereq: perm.

## Music Education

**160 Music Fundamentals (3)**

For elementary education majors only.

**161 Music for the Classroom Teacher (3)**

Prereq: 160 with minimum grade of C. Methods of teaching elementary music. For elementary education majors only.

**163 Introduction to Music Education (2)**

Introduction of major components of music teaching in elementary and secondary schools.

**261 String Methods and Materials (2, max 6)**

Prereq: soph rank in music education/music therapy. Instruction in stringed instruments with emphasis on teaching techniques, methods, and materials.

**262 Music in Early Childhood (3)**

Prereq: MUS 160 with minimum grade of C. Methods and materials for aesthetic development of preschool children. Exploration of reading readiness and vocal, rhythmic, listening activities.

**263 Wind and Percussion Methods and Materials (2, max 12)**

Prereq: soph rank in music education/music therapy. Instruction in wind and percussion instruments with emphasis on teaching techniques, methods, and materials.

**362 Teaching Instrumental Music in the Elementary and Middle School (3)**

Prereq: jr rank as music major. A study of procedures to be used for planning, implementing, administering, and evaluating instrumental music programs in elementary and middle schools. Also included is a survey of appropriate teaching materials and application of current technology.

**363 Secondary School Instrumental Methods and Materials (3)**

Prereq: jr rank in music education/music therapy. Literature and rehearsal techniques for secondary school bands and orchestras, including administration of the high school instrumental music program.

**364 Secondary School Vocal Techniques and Materials (3)**

Prereq: jr rank in music education/music therapy. (spring) Literature and rehearsal techniques for high school choral groups.

**366 Teaching of Music in the Elementary Grades (3)**

Prereq: jr rank in music education/music therapy. (fall) Materials and methods for elementary music. For music majors only.

**464 Marching Band Techniques (2)**

Prereq: jr rank in music education/music therapy. (spring) Techniques for preparation of high school and college marching band performance.

**465 Jazz Ensemble Methods (2)**

Prereq: jr rank in music education/music therapy. Methods of organizing and implementing jazz ensemble programs in secondary schools. Includes survey of appropriate materials.

**468 General Music in the Junior High School (2)**

Prereq: jr rank in music education/music therapy, or perm. (winter) Materials and methods; listening program; changing voice.

## Music History and Literature

**120 Introduction to Music Literature (3) (2H)**

Prereq: nonmusic major. Development of listening skills for understanding elements of musical style in historical perspective and significance of music as fine art.

**124 Language of Rock Music (3)**

Examines birth, growth, and development of rock music through its acceptance as art form with significant influence on youth culture and resulting social implications.

**125 Introduction to Music History and Literature (3)**

Prereq: music major or perm. (fall) Survey of musical forms, styles, performance media (including jazz and non-Western) from Gregorian era to present.

**150 Viewing Performance (2)**

Integrates classroom and student life activities at the University by combining the O.U. Artist Series and major productions of the schools of Comparative Arts, Music, Dance, and Theater with a seminar course dealing with characteristics of the medium and artistic concerns. A two-hour seminar precedes and follows each of the four performances.

**321 History and Literature of Music (3)**

Prereq: 103 or perm. History of music with survey of musical literature to 1600.

**322 History and Literature of Music (3)**

Prereq: 321 or perm. History of music with survey of musical literature, 1600-1750.

**323 History and Literature of Music (3)**

Prereq: 322 or perm. History of music with survey of musical literature, 1750 to present.

**421A The Literature of Vocal Music (3)**

Prereq: perm.

**421B The Literature of Piano Music (3)**

Prereq: perm.

**421C The Literature of Chamber Music (3)**

Prereq: perm.

**421D The Literature of Orchestral Music (3)**

Prereq: perm.

**421E The Literature of Organ Music (3)**

Prereq: perm.

**421F The Literature of Opera (3)**

Prereq: perm.

**427 Folk Music in the United States (3)**

Introduction to selected types of folk music in U.S.

**428 Jazz History (3)**

Study of various musics collectively known as jazz.

## Independent Studies in Music

**498 Independent Project (1-6)**

Prereq: perm.

**499 Independent Readings in Music (1-12)**

Prereq: perm.

## Music Theory and Composition

**100 Introduction to Music Theory (3)**

(2H)

Prereq: nonmusic majors only. Introduction to staff, pitch, and rhythmic notation, chords, pop music notation, etc.

**101 Music Theory I (4)**

Prereq: music theory placement exam. Melodic, harmonic, and rhythmic principles of music and its notation. 5 days per wk.

**101A Music Theory (3)**

Prereq: nonmusic majors only, ability to read music. Melodic, harmonic, and rhythmic principles of music and its notation.

**102 Music Theory II (4)**

Prereq: 101 or perm. Continuation of 101. See 101 for description.

**102A Music Theory (3)**

Prereq: 101A, nonmusic majors only. Continuation of 101A. See 101A for description.

**103 Music Theory III (4)**

Prereq: 102. Continuation of 101 and 102. See 101 for description.

**201 Music Theory IV (3)**

Prereq: 103 with a minimum grade of C-. Harmonic and contrapuntal practices of 18th, 19th, and 20th centuries, including structural analysis of small and large forms.

**202 Music Theory V (3)**

Prereq: 201. Continuation of 201. See 201 for description.

**203 Music Theory VI (3)**

Prereq: 202. Continuation of 201 and 202. See 201 for description.

**204 Dictation and Sight Singing (2)**

Prereq: 103 with a minimum grade of C-. Should be taken concurrently with 201.

**205 Dictation and Sight Singing (2)**

Prereq: 204 with a minimum grade of C-. Continuation of 204.

**206 Dictation and Sight Singing (2)**

Prereq: 205. Continuation of 204 and 205. See 204 for description.

**304 Instrumentation (3)**

Prereq: 203. (fall) Technical characteristics of instruments of band and orchestra. Arranging for small ensembles.

**305 Orchestration I (3)**

Prereq: 203, 304. (winter) Scoring for instrumental ensembles with emphasis on intra- and cross-choir scoring. Writing of transcriptions and score reductions.

**306 Orchestration II (3)**

Prereq: 305. (spring) Continuation of 305. See 305 for description.

**310 Composition I (2)**

Prereq: 203, 206. Introduction to 20th-century compositional techniques. Writing smaller compositions.

**311 Composition II (2)**

Prereq: 310. Continuation of 310. See 310 for description.

**312 Composition III (2)**

Prereq: 311. Continuation of 310 and 311. See 310 for description.

**402A Styles I (3)**

Prereq: 203, 206 with minimum grade of C- in each. (offered alternate years) Analysis of 15th-century music.

**402B Styles II (3)**

Prereq: 203, 206 with minimum grade of C- in each. (offered alternate years) Analysis of post-Romantic music.

**402C Styles III (3)**

Prereq: 203, 206 with minimum grade of C- in each. (offered alternate years) Analysis of 20th-century music.

**405A Jazz Harmony I (3)**

Prereq: 203, 206, perm. keyboard skills as determined by instructor. Harmonic vocabulary, notational systems, and chord progressions in traditional jazz.

**405B Jazz Harmony II (3)**

Prereq: 405. Continuation of 405A. See 405A for description.

**407A Counterpoint I (3)**

Prereq: 203, 205. (offered alternate years) Analysis and composition in sacred style of 16th and 17th centuries.

**407B Counterpoint II (3)**

Prereq: 203, 205. (offered alternate years) Analysis and composition of 18th-century contrapuntal forms.

**410A Composition (2)**

Prereq: 312. Original instrumental and vocal compositions. Investigation of experimental compositional techniques.

**410B Composition (2)**

Prereq: 312. electronic comp. only. Original composition in electronic medium for tape alone, live electronic instruments, or conventional instruments with electronic tape.

**411 Composition (2)**

Prereq: 410A. Continuation of 410A. See 410A for description.

**412 Composition (2)**

Prereq: 411. Continuation of 410A and 411. See 410A for description.

**413 Introduction to Electronic Music (2)**

Techniques, theories, and aesthetics of electronic music. Development of skills as they apply to voltage-controlled synthesizer and tape splicing, and manipulation techniques.

**413A Introduction to Electronic Music for Music Majors (2)**

Prereq: music majors only. Introduction to electronic music covering basic concepts and providing a broad overview of current practices and trends on applying technology to musical ends.

**414 Senior Practicum in Theory (2)**

Prereq: sr rank. Preparation of theory major's sr project.

**415 Microcomputer Applications in Music Production (3)**

Prereq: 413 or 413A and perm. Basic concepts of digital FM synthesis and MIDI sequencing. Brief introduction to the use of microcomputers in music printing and other systems commonly used for electronic music production.

**416 Project in Electronic Music (3)**

Prereq: 415 and perm. Techniques of studio operation and maintenance, multi-track recording, tape editing, and mixing as they apply to electronic music.

**416A Advanced Projects in Electronic Music (3)**

Prereq: perm. approved project proposal, and 416. A project proposal must be submitted to and approved by the instructor prior to enrolling in this course. An electronic music composition will be produced for public performance.

**416B Advanced Recording Studio Techniques (4)**

Prereq: 416 and perm. Instruction in operating a 16-track recording studio. Topics include advanced miking techniques, sound processing, mixing, and SMPTE time code synchronization on a 16-track recorder.

**417 Advanced Digital Synthesis (4)**

Prereq: 415 and perm. Concepts of digital sound synthesis primarily using the Synclavier system. Topics include advanced FM synthesis, additive synthesis, sampling, sequencing, and SMPTE time code synchronization on the Synclavier.

**417A Advanced Digital Synthesis and Multi-track Projects (4)**

Prereq: perm. approved project proposal, and 416B, 417. A project proposal must be submitted and approved by the instructor prior to enrolling in this course. Supervision and guidance for working on creative electronic projects using the Synclavier and the 16-track recording studio.

## Music Therapy

**180 Music Therapy Practicum I (1-2)**

Prereq: fr rank in music therapy. Selected field experience in approved clinical facilities; field evaluation of student.

**181 Introduction to Music Therapy (3)**

(fall) Introduction to clinical practice of music therapy; observation and field trips.

**280 Music Therapy Practicum II (1-3)**

Prereq: soph rank in music therapy or perm. Selected field experiences in approved clinical facilities; field evaluation of student.

**281 Observation, Evaluation, and Research in Music Therapy (3)**

Prereq: soph rank or perm. (fall) Observation and evaluation skill development through classroom, videotape, and field data collection and analysis; tests and evaluations; research methods and their application to clinical investigations. 2 lec, 1 lab.

**282 Music Therapy Activities for Classroom and Clinic (3)**

Prereq: soph rank. (winter) Development of skills in treatment planning and application including activity design and analysis for problems in all clinical areas.

**283 Recreational Music Instruments and Materials (3)**

Prereq: soph rank. (spring) Accompanying instruments and group music activities; special instrumental methods for handicapped.

**380 Music Therapy Practicum III (1-3)**

Prereq: jr rank in music therapy or perm. Selected field experiences in approved clinical facilities; field evaluation of student.

**381 Psychological Foundations of Music (3)**

Prereq: jr rank in music therapy/music education. Basic study of acoustics, ear and hearing, and psycho-socio-physiological process involved in music behavior.

**382 Psychological Foundations of Music II (3)**

Prereq: 381. Historical review, theory of music therapy, survey of current literature and trends in music therapy; influence of music on behavior, physiology, emotions, learning, and work performance.

**480 Music Therapy Practicum IV (1-3)**

Prereq: sr rank in music therapy or perm. Selected field experience in approved clinical facilities; field evaluation of student.

**481 Music Therapy Principles and Techniques I (3)**

Prereq: 382 and jr rank in music therapy. Problems of exceptional children and therapist strategies and techniques for remediation; terminology; treatment settings; other activity therapy approaches and techniques.

**482 Music Therapy Principles and Techniques II (3)**

Prereq: 481 and jr rank in music therapy. Problems in psychiatry and rehabilitation and therapist strategies and techniques for remediation; terminology; treatment settings; traditional and current psychotherapeutic and behavioral approaches; other activity therapy techniques and approaches.

**483 Music Therapy Principles and Techniques III (3)**

Prereq: 482 and sr rank in music therapy. Program development process for selected clinical populations; administration of music therapy program.

**489 Clinical Training in Music Therapy (1)**

Prereq: 482, and sr status in music therapy. 6 months as full-time music therapy intern at NAMT-approved clinical training facility following completion of sr yr.

## NURSING

### Associate Degree Program

The following courses for the A.A.S. program in nursing are available only on the Zanesville campus.

#### 100 Introduction to Nursing (1)

Prereq: perm. Introduces new nursing students to associate degree nursing. Includes exploration of the impact of past, present, and future issues in nursing. Will view the role of the technical nurse within the profession and will consider values and beliefs.

#### 101 Fundamentals of Nursing Care I (7)

Prereq: perm. An introduction to nursing care as it relates to a person's health and environment. Nursing is presented within the program framework of nurses as assisting people in the effective use of functional health patterns (FHPs) through the roles of the nurse as provider of direct care, communicator, and manager of care. Basic concepts, assessments, and fundamental nursing skills related to stress and adaptation, values/beliefs, roles, health perception/health management, activity/ exercise, and nutrition/ metabolism are presented. Focus on assessment skills.

#### 102 Fundamentals of Nursing Care II (7)

Prereq: perm. Continuation of 101. The roles of the nurse as provider of direct care, communicator, and manager of client care are continued to provide the framework for assisting adult individuals in the use of FHPs. Concepts and skills related to nutritional/metabolic, elimination, cognition/perception, coping/stress, sleep, sexuality, health perception/health management. Development of skills and the selection of nursing diagnosis. Further basic nursing skills used to care for the adult client are developed and evaluated.

#### 103 Nursing Care of Individuals I (7)

Prereq: perm. Focuses on the roles of the nurse as provider of direct care, communicator, manager of care for adult clients experiencing alterations in selected FHPs. Alterations in exercise-activity patterns and health perception-health maintenance patterns are addressed. Clinical experiences are selected to enable students to assist these selected clients in promoting, maintaining, and restoring health potential. In addition, students are introduced to new fundamental skills while continuing to master the skills introduced in Nursing 101 and 102.

#### 104 Nursing Care of Individuals II (7)

Prereq: perm. Focuses on the roles of the nurse as provider of direct care, communicator, and manager of client care, who promotes, maintains, and restores health to adult clients with alterations in the nutritional/metabolic FHP. This includes clients with alterations in digestion, absorption, metabolism, impairment of skin integrity, and dysfunction of the endocrine glands. Focuses on evaluation of client care. Nursing implications of related pathophysiology, diagnostic tests, medical, surgical, dietary, and pharmacological therapies are included.

#### 201 Nursing Care of Individuals III (6)

Prereq: perm. Focuses on the roles of the nurse as provider of direct care, communicator, and manager of care to provide care to adult clients experiencing alterations in selected FHPs. Alterations in cognitive-perceptual patterns, sexuality-reproductive patterns, elimination patterns, and sleep-rest patterns are addressed. Clinical experiences are selected to enable students to assist these selected clients in attaining, regaining, and maintaining their health potential. Students will continue to practice skills introduced in previous nursing courses, while basic knowledge and skills central to care of clients with these specific alterations in functional health patterns will be introduced.

#### 202 Nursing Care of Individuals IV (6)

Prereq: perm. Focuses on the care of the individual experiencing alterations in FHPs such as value-belief, role-relationship, cognitive-perceptual, self perception, coping-stress tolerance, and health perception-health management patterns. Students gain a better understanding of self and of the individual who is having difficulty in adapting to the stress of everyday life. Consideration given to precipitating factors, prevention, community resources, and treatment modalities. Development of knowledge and specific skills needed in psychiatric nursing.

#### 203 Nursing Care of Individuals V (6)

Prereq: perm. Focuses on the roles of the nurse as provider of direct care, communicator, and manager of care as applied to the maternal-family experience. Primary emphasis on natural and normal process; however, care of clients with alterations in FHPs is included. Classroom and the clinical setting provided for development of knowledge and specific skills needed in the nursing care of maternal and newborn clients.

#### 204 Nursing Care of Individuals VI (6)

Prereq: perm. Focuses on the roles of the nurse as communicator, provider, and manager of care to clients experiencing alterations in FHPs, actual or potential. Modified approach to family-centered care of children from early infancy through adolescence presented with emphasis on growth, development, and communication needs for each age group. Clinical experiences enable student to assist pediatric clients in attaining, regaining, and maintaining their health potential. Students will continue to practice skills introduced in previous nursing courses while basic knowledge and skills central to parent-child nursing practices in hospital, clinic, and home are introduced.

#### 205 Nursing Care of Individuals VII (12)

Prereq: perm. Focuses on the roles of the nurse as provider, communicator, and manager care for adult clients experiencing alterations in FHPs. Acute alterations in FHP requiring intensive and long-term therapy are addressed. Clinical experiences enable students to assist clients in promoting, maintaining, and restoring their health potential. Focus is on intermediate concepts and challenges in client care. Role transition from student to graduate nurse is explored.

#### 206 Trends and Issues in Nursing (1)

Prereq: perm. Provides an opportunity to further explore role relationships of the nurse advantageous for the transition to registered nursing. Emphasis is placed on exploring current issues, seeking sources of information, and evaluating implications for nursing and the nurse.

#### 250 Independent Study (1-5, max 5)

Prereq: perm. Research, readings, and clinical observations in selected areas of nursing under direction of faculty member.

#### 290A-Z Current Issues in Nursing (1-5, max 5)

Prereq: perm. Series of elective short courses and workshops for nursing students at OU-Zanesville. RNs and allied health professionals from the local area may enroll.

#### 291A-D Current Issues in Nursing (1-5, max 5)

Prereq: perm. See 290A-Z for description.

### Baccalaureate Program

The following courses for the Bachelor of Science in nursing degree are offered on the Athens campus and on regional campuses. The program is for registered nurses only.

#### 295 Introduction to Baccalaureate Nursing Education (1)

The philosophy, conceptual framework, and curriculum of the Ohio University School of Nursing. Technical and professional levels of nursing education compared.

#### 300 Transitions in Nursing (5)

Prereq: Ohio RN licensure, nursing major. Focus on issues related to transition from technical to professional nursing. History and development of nursing as a profession; professional practice and the nursing process; nursing theories; nursing research; general systems theory; role theory; Ohio University School of Nursing's philosophy and conceptual framework.

#### 310 Health Appraisal I (5)

Prereq: 300 or concurrent with 300. Focus on developing cephalocaudal nursing assessment skills and the ability to draw valid inferences from the data collected.

#### 320 Health Appraisal II (5)

Prereq: 300 or concurrent with 300. Focus on total health appraisal of individuals. Assessment of various dimensions of health throughout the human lifespan. Nursing process used as framework for nursing practice with emphasis on the individual's responses as holistic, unified system.

**330 Family Nursing (5)**

Prereq: 300 and 310. Focus on nursing care of family system throughout the life cycle. Synthesis of family theory and application of the nursing process will provide the foundation for practice. Independent clinical experience will occur in a variety of settings.

**340 Community Health Nursing (5)**

Prereq: 320, 330. Focus on nursing care of aggregate systems within a community. Topics covered include community health nursing roles and basic concepts of community health. Clinical component emphasizes health promotion and disease prevention. Nursing process, collaboration, interpersonal skills, and teaching skills in working with clients from diverse population groups.

**360 Management Issues in Nursing (5)**

Prereq: 300 or perm. Focus on nursing management through use of a systems approach. Leadership models and behavior at various organizational levels discussed. Critical management strategies introduced.

**400 Research: Critique and Methodology (5)**

Prereq: 360 or concurrently with 360. Focus on research in nursing practice. Topics include interrelationships among theory, practice, and research; theory and science in nursing; nursing practice models; steps in the research process; critiquing of current research; development of a research proposal.

**415 Restorative Nursing (5)**

Prereq: 400. Focus on nursing care of individuals, families, and groups experiencing alterations in health and the responses to those changes throughout the life cycle. Concepts addressed include loss, pain, crisis, coping, quality of life. Selected professional roles practiced in primary, secondary, and tertiary health care settings.

**425 Clinical Applications in Nursing (5)**

Prereq: 400. Examination of selected nursing situations and independent clinical professional nursing roles.

**440 Strategic Planning in Nursing Care (5)**

Prereq: 400. Application of strategic planning concepts to professional nursing practice. Topics addressed are assessment of organizational system and implications for change; accountability and quality assurance; power and influence. Active involvement as change agent and implementation of planned change project. Clinical experience in a variety of settings.

**460 Trends and Issues of Professional Nursing (5)**

Prereq: 420, 430, and 440 or concurrently with 420, 430, or 440 in final quarter of program. Synthesis course designed to enhance student's knowledge of professional nursing. Past and present issues and trends in nursing examined. Emerging trends and futuristic nursing studied. Content will vary depending upon student needs and interests as well as events occurring in discipline of nursing.

**465 Teaching: Theory and Strategies (5)**

Teaching strategies used by professional nurse in meeting individual, family, and group needs relevant to holistic health care. Nursing process provides basis for planning, implementing, and evaluating teaching. Classroom experiences provide opportunities for students to practice and demonstrate skills and techniques in preparing, developing, and implementing teaching materials and techniques.

**475 Gerontic Nursing (5)**

Normal aging process and pathological disturbances in physical and mental functioning associated with aging. Techniques in health appraisal for elderly. Classroom experiences provide opportunities for students to explore holistic health needs and strategies for elderly. Nursing interventions based on special needs and problems of elderly explored through actual and simulated experiences.

**485 Legal Issues in Nursing (5)**

Addresses content of legal, legislative, political, and health care delivery systems, especially the interface of these systems. Relevant legal, ethical, and moral issues involving actual and simulated nursing practice cases will be explored.

**490 Independent Study (1-5)**

Prereq: perm. Student chooses a topic of specific interest with the assistance of a faculty member. May be used to meet the nursing elective requirement.

**491 Current Topics (1-5)**

Prereq: Ohio RN licensure. Nursing workshops.

**495 Critical Care Nursing (5)**

Nursing care requirements of patients in intensive care units, coronary care units, emergency room areas, burn units, etc. Nursing process framework utilized as holistic responses of patients and families to acute life-threatening situations.

## OFFICE ADMINISTRATION TECHNOLOGY

The following courses for the A.A.B. program in office administration technology (OAT) are available only on the Chillicothe campus. For availability of concentration areas, see the Colleges and Curricula section under University College.

**111 Beginning Shorthand (3)**

Introduction to theory of shorthand with emphasis on writing correct theory and developing reading rates. 3 lec, 2 lab.

**112 Intermediate Shorthand (3)**

Prereq: 111. Continuation of 111. Completing theory and developing skills of taking dictation and elementary transcription. 3 lec, 2 lab.

**113 Advanced Shorthand (3)**

Prereq: 112. Theory and speed building. Emphasis on developing speed in dictation and accuracy in transcription. 3 lec, 2 lab.

**121 Introductory Keyboarding/Typing (3)**

Introduction to touch typewriting system with emphasis on correct techniques, mastery of keyboard, simple business correspondence, tabulation, and manuscripts. 3 lec, 2 lab.

**122 Intermediate Typing (3)**

Prereq: 121. Emphasis on production typing problems and speed building. Attention given to development of student's ability to function as expert typist producing mailable copies. Production work involves tabulations, manuscripts, correspondence, and business forms. 3 lec, 2 lab.

**123 Advanced Typing (3)**

Prereq: 122. Advanced typing problems and techniques, knowledge and skills involved in production typewriting. Designed to acquire maximum in production for high-level office employment. 3 lec, 2 lab.

**128 Magnetic Media (3)**

Prereq: 121, 122. Intensive study and operation of automatic keyboards in information system environments. Application of recording, logging, proofreading, and temporary and permanent revisions of information processing.

**131 Office Communication (3)**

Prereq: English 150 or equiv. Review of basic English grammar with emphasis on improving capitalization and punctuation for more effective business letter writing.

**141L Legal Secretarial Terminology (2)**

Prereq: 121. Intensive course of study in legal terminology and vocabulary, including definitions, usage, derivations, and spelling. 2 lec.

**141M Medical Secretarial Terminology (2)**

Prereq: 121. Structure of medical words and terms. Emphasis on spelling and defining commonly used prefixes, suffixes, root words, and their combining forms. 2 lec.

**151 Alphabetic Shorthand (3)**

Prereq: 121. Theory and application of alphabetic shorthand system, including development of basic dictation skill. Provides students with sufficient skill to produce mailable letters dictated at moderate rate.

**168 Electronic Office Systems I (3)**

Prereq: 121, 225. Introduction to information system office. Covers discussions and skill development in transmittal services, written communications, and records filing and control.

**171 Administrative Support I (3)**

Prereq: 121. Instruction in general office practices and general office filing. Emphasis on general rules and procedures in filing and records management along with general office routines. Personality development also discussed thoroughly. 3 lec, 2 lab.

**171L Legal Secretarial Procedures I (3)**

Prereq: 121. Instruction in legal office practices and legal office filing. See 171 for further description. 3 lec, 2 lab.

**171M Medical Secretarial Procedures I (3)**

Prereq: 121. Instruction in medical office practices and medical office filing. See 171 for further description. 3 lec, 2 lab.

**172 Administrative Support II (3)**

Prereq: 171. Continuation of 171. Instruction in general office practices and filing.

**172L Legal Secretarial Procedures II (3)**

Prereq: 171L. Emphasizes machine transcription utilizing complete production units concerning legal correspondence and documents. 3 lec, 2 lab.

**172M Medical Secretarial Procedures II (3)**

Prereq: 171M. Emphasizing machine transcription utilizing complete production units concerning medical correspondence and documents, such as case histories, articles, and hospital reports. 3 lec, 2 lab.

**178 Electronic Office Systems II (3)**

Prereq: 121, 168. Introduces student to duties of administrative support areas of office. Includes dealing with travel and conferences; obtaining research and organization of business data; and introduction to new office professions.

**189 Independent Study (1-5)**

Prereq: perm. Studies in selected subject areas in secretarial field. May be repeated up to 5 credit hrs.

**218 Office Communications Dictation and Proofreading (3)**

Prereq: 121. Introduction to proper procedure for dictating letters and reports; practice effective dictation techniques on equipment; dictate original data from outline to obtain final quality copy. Effective proofreading techniques emphasized.

**221 Machine Transcription (3)**

Prereq: 121, 122, 131. Student becomes proficient in taking dictation from transcribing machine. Includes actual operation of machine, development of speed and accuracy in transcription, and mastery of other related transcription skills.

**225 Word Processing I (3)**

Prereq: 121 or equiv. Theory of word processing including definition of terms and organization of word processing system. Career possibilities explored. Examines difference between word processing system and traditional office structure. Includes tours of word processing centers and some experience working on text editors.

**226 Word Processing II (3)**

Prereq: 121 or equiv; 225. Continuation of theory of word processing and practical application using dedicated word processing system.

**231 Machine Computation (3)**

Prereq: MATH 101 or equiv. Students instructed in use of electronic calculators as pertaining to common business computations, accounting, and computer functions.

**239 Information Processing (3)**

Prereq: 121, 225, 226. Designed to introduce student to word and information processing units with emphasis on personal computer.

**241G General Dictation and Transcription I (3)**

Prereq: 113, 123. Development of shorthand skills with emphasis on mailable copy. 3 lec, 2 lab.

**241L Legal Dictation and Transcription I (3)**

Prereq: 113, 123. Legal secretary preparation. Skill in taking dictation and transcribing material involving legal shorthand forms and phrases. Proficiency in use of legal vocabulary, forms, and procedures. 3 lec, 2 lab.

**241M Medical Dictation and Transcription I (3)**

Prereq: 113, 123. Medical secretary preparation. Skill in taking dictation and transcribing material involving medical shorthand forms and phrases. Proficiency in use of medical vocabulary, forms, and procedures. 3 lec, 2 lab.

**242G General Dictation and Transcription II (3)**

Prereq: 241G. Furthering of skills in taking dictation and transcribing various forms of correspondence. 3 lec, 2 lab.

**242L Legal Dictation and Transcription II (3)**

Prereq: 241L. Further development of skills in taking dictation and transcribing legal documents, instruments, and letters rapidly and accurately. 3 lec, 2 lab.

**242M Medical Dictation and Transcription II (3)**

Prereq: 241M. Further development of skills in taking medical dictation related to various types of medical correspondence such as case histories, articles, and hospital reports. 3 lec, 2 lab.

**248 Administration of Record Systems (3)**

Prereq: 171 or equiv. Controlling cost and improving effectiveness of records and information management within business enterprises. Includes control of record creation, maintenance, and disposition through systems analysis; forms management, protection methods.

**249 Internship I (2-5)**

Prereq: 128, 168, 178, 231. Practical field experience or in-class office simulation. 14-35 lab.

**250 Seminar I (2)**

Prereq: concurrent with 249. Special topics and problems encountered in field experience discussed. Opportunity to share ideas and experiences and to find possible answers to questions arising in actual working situations.

**258 Stress Management for Office Personnel (3)**

Involves recognition of stress, how to handle stress within yourself; how to assist office personnel in dealing with stress, and implications of time in its relationship to stress.

**262 Report and Letter Writing (4)**

Prereq: 131 or ENG 150. Extensive and detailed practice in written communication for business, industry, and professions. Involves composition of letters, memoranda, reports. 4 lec.

**267 Office Administration (3)**

Involves principles and practices of management of flow of information within enterprise. Includes basic management functions of planning, controlling, organizing, and coordinating as applied to office services, physical facilities, systems and procedures, work measurement and standards, and business information systems. 3 lec.

**268 Information System Design (3)**

Effective use of management techniques and equipment in meeting informational needs of business and industry. How to design optional system utilizing feasibility studies, etc., and how to implement design.

**288 Information System Equipment Selection — Acquisition Seminar (2)**

Remodeling or designing new facilities, including space management as well as source, cost, and justification for special equipment and furniture. Use of consultants, feasibility studies reviewed.

**289 Special Topics (1-5)**

Prereq: perm. Projects concerning secretarial field explored on 1-to-1 basis with instructor.

**293 Seminar II (2)**

Concurrent with 299. Continuation of discussion concerning special topics and problems encountered in field experience. 2 lec.

**298 Practicum in W/P Supervision (2)**

Experiences in supervision of word/data processing labs or centers. Responsibilities include assisting W/P trainees, demonstrating equipment to classes/visitors, producing complex documents, designing forms, learning/developing new systems.

**299 Internship II (2-5)**

Prereq: 249. Practical field experience or in-class office simulation continued. 14-35 lab.

## OFFICE MANAGEMENT TECHNOLOGY

The following courses for the A.A.B. program in office management technology (OMT) are available only on the Lancaster campus.



For availability of concentration areas, see the Colleges and Curricula section under University College.

### 120 Refresher Typing/Keyboarding (3)

Prereq: basic keyboarding knowledge. Designed for students with some knowledge of the typewriter keyboard who need a review of basic skills, an updating of formats, and/or an introduction to the use of the computer for keyboarding. May be taken instead of OMT 121.

### 121 Keyboarding (3)

Introduction to touch system with emphasis on correct techniques, mastery of keyboard, simple business correspondence, tabulation, and manuscripts. Not valid for students who are already familiar with the typewriter keyboard and/or students who have opted to take OMT 120. 3 lec, 2 lab.

### 122 Keyboarding II/Formatting (3)

Prereq: 121. Emphasis on formatting problems and speed building. Attention given to development of student's ability to function as expert in producing mailable copies. Production work involves tabulations, manuscripts, correspondence, and business forms. 3 lec, 2 lab.

### 123 Keyboarding III/Production (3)

Prereq: 122. Advanced production problems and techniques. Designed to acquire maximum in production for high-level office employment. Also includes unit on electronic typewriters. 3 lec, 2 lab.

### 131 Office Communication (3)

Review of basic English grammar with emphasis on improving capitalization and punctuation for more effective business letter writing.

### 141L Legal Terminology (2)

Prereq: 111, 121. Intensive course of study in legal terminology and vocabulary, including definitions, usage, derivations, and spelling. 2 lec.

### 141M Medical Terminology (2)

Prereq: 111, 121. Structure of medical words and terms. Emphasis on spelling and defining commonly used prefixes, suffixes, root words, and their combining forms. 2 lec.

### 151 Alphabetic Shorthand (3)

Prereq: 121. Theory and application of alphabetic shorthand system, including development of basic dictation skill and note-taking ability. Provides student with sufficient skills to transcribe letters dictated at moderate rate. Also gives student a tool for more efficient recording of messages, minutes of meetings, instructions, and class or research notes.

### 171 Administrative Support I (3)

Prereq: 121 and 225. Instruction in current office procedures and records management. Students will be exposed to an intensive office simulation project. 3 lec, 2 lab.

### 172 Administrative Support II (3)

Prereq: 171. Continuation of 171. Instruction in office procedures and administrative assistance tasks.

### 189 Independent Study (1-5)

Prereq: perm. Studies in selected subject areas in office management field. May be repeated up to 5 credit hrs.

### 200 Desktop Publishing I (3)

Prereq: none; 120/121 and 225 helpful. Will learn PageMaker software. Course will cover publishing information, graphic design basics, and will prepare students to produce newsletters, brochures, catalogs, etc., that are of professional quality.

### 201 Desktop Publishing II (3)

Prereq: 200. Continuation of Desktop Publishing I theory and applications using PageMaker.

### 221 Machine Transcription (3)

Prereq: 121, 122 or concurrently with 122, 131. Student becomes proficient in taking dictation from transcribing machine. Includes actual operation of machine, development of speed and accuracy in transcription, and mastery of other related transcription skills.

### 225 Word Processing I (3)

Prereq: 121 or equiv. Theory of word processing including definition of terms and organization of word processing system. Career possibilities explored. Examines difference between word process-

ing system and traditional office structure. Includes tours of word processing centers and instruction in microcomputer word processing.

### 226 Word Processing II (3)

Prereq: 121 or equiv; 225. Continuation of theory of word processing and practical application using word processing software on microcomputer.

### 231 Machine Computation (1)

Students instructed in use of electronic calculators as pertaining to common business computations, accounting, and computer functions.

### 239 Information Processing (3)

Prereq: 121, 225, 226. Designed to introduce students to a variety of software—including integrated hardware and software evaluation processes—using the microcomputer.

### 242 Dictation and Transcription II (3)

Prereq: 151, 241G. Furthering of skills in taking dictation and transcribing various forms of correspondence. 3 lec, 2 lab.

### 249 Internship I (2-5)

Prereq: 123, 231, 241. Practical field experience or in-class office simulation. 14-35 lab.

### 250 Seminar I (2)

Prereq: concurrent with 249. Special topics and problems encountered in field experience discussed. Opportunity to share ideas and experiences and to find possible answers to questions arising in actual working situations.

### 262 Report and Letter Writing (4)

Prereq: 122 and 131 or ENG 150. Extensive and detailed practice in written communication for business, industry, and professions. Involves composition of letters, memoranda, reports. 4 lec.

### 267 Office Administration (3)

Prereq: 123, 172. Involves principles and practices of management of flow of information within enterprise. Includes basic management functions of planning, controlling, organizing, and coordinating as applied to office services, physical facilities, systems and procedures, work measurement and standards, and business information systems. Emphasis on matters of personnel. 3 lec.

### 289 Special Topics (1-5)

Prereq: perm. Projects concerning office management field explored on 1-to-1 basis with instructor.

### 293 Seminar II (2)

Concurrent with 299. Continuation of discussion concerning special topics and problems encountered in field experience. 2 lec.

### 299 Internship II (2-5)

Prereq: 249. Practical field experience or in-class office simulation continued. 14-35 lab.

## OHIO PROGRAM OF INTENSIVE ENGLISH

Credit hours listed for OPIE 40, 45, 50, 55, 60, and 99 are not applicable to degree requirements. For English for nonnative speakers applicable to degree requirements, see reference to ENG 150A, 151A in English under ENG 150, 151.

### 40 Intensive English as a Foreign Language (15)

Full-time intensive study of English as foreign language for students beginning at elementary level. Five classroom practice and recitation hrs daily. Primary emphasis on developing mastery of spoken English. Normally followed by 45.

### 45 Intensive English as a Foreign Language (15)

Prereq: intermediate proficiency level. Full-time intensive study of English as foreign language. 5 hrs of classroom practice and recitation daily. Practice of spoken English continues, but emphasis shifts to written English. May follow 40.

### 50 Intensive English as a Foreign Language (15)

Prereq: advanced proficiency level. Full-time intensive study of English as foreign language for students beginning at advanced

level. 5 hrs of classroom practice and recitation daily. Emphasis on both spoken and written English usage. May follow 40 or 45.

**55 Semi-intensive English as a Foreign Language (12)**

Semi-intensive supplemental study of English as foreign language for students who may enroll in 1 academic course concurrently. 3 hrs of classroom practice and recitation daily. Classroom activity includes both spoken and written English usage, but emphasis on written language practice. May follow either 45 or 50.

**60 Supplemental English as a Foreign Language (8)**

Semi-intensive supplemental study of English as foreign language for students enrolled in part-time academic program. 2 hrs of classroom practice and recitation daily. Classroom activity includes both spoken and written English usage, but emphasis on written language practice. May follow either 45 or 50 or 55.

**99 Special Studies in English as a Foreign/Second Language (1-10)**

Provides independent studies for international students on campus (e.g. pronunciation class or English for Special Purposes).

## PHILOSOPHY

The major requirement for the A.B. degree consists of a minimum of 40 hours, including 310, 312, 320, and at least three courses numbered above 400.

The general requirement for the philosophy minor is 25 hours, at least 20 of which must be courses numbered 200 or above. For more information, contact the Department of Philosophy.

Students may begin their study of philosophy with courses at the 100, 200, or 300 level, except as limited by specific prerequisites.

**100 Summer Scholar Independent Studies (1-5)**

Prereq: perm. A variable content, variable credit reading course allowing Summer Scholar students to pursue traditional and contemporary philosophical issues. Readings and discussions may be directed toward the interests of the students and emphasis will be given to improving students' writing.

**101 Fundamentals of Philosophy (5) (2H)**

Survey of selected basic problems, concepts, and methods in philosophy.

**120 Principles of Reasoning (4) (1M)**

Basic concepts of logic and techniques for judging validity of arguments introduced. System for symbolizing arguments and deriving conclusions from premises employed. Some of following topics also covered: informal fallacies in reasoning, syllogistic or Aristotelian logic; Venn diagrams, truth tables. Most sections are traditional lecture/test format, some taught in computer-assisted format, others use self-paced approach.

**130 Introduction to Ethics (4) (2H)**

Discussion of classic and/or modern philosophical views of human values, ideals, and morality. Provides introductory survey of some main problems, concepts, and results of ethics including selected philosophers of past and present.

**160 Introduction to Religion (3) (2H)**

Definition of religion and analysis of its various aspects including ritual, social, experiential, and symbolic.

**216 Philosophy of Science Survey (3) (2H)**

Nontechnical survey of types, testing, and credibility of hypotheses; methods of experimental inquiry; measurement; laws, theories and their role in explanation, concept formation.

**231 Philosophy of Sport (4)**

Prereq: soph rank. Philosophical exploration into nature, meaning, purposes, values, and ideals of sport. Topics include goods and evils of competition, nature of sports experience, winning and losing, aesthetic and ethical dimensions of sport, ultimate athlete, scholastic athletics, philosophy of physical education, concept of sportsmanship, etc.

**232 Philosophy of Art (3) (2H)**

Conceptual analysis of common assumptions, attitudes, theories, and ideas about arts, their criticism, and appreciation.

**235 Business Ethics (3)**

Prereq: soph rank. Examination of moral reasoning as it pertains to institutions and practices of contemporary business. First half is

devoted to basic ethical concepts and analysis of basis for acceptable ethical theory, investigation of role of government and society in their relationship to business, and value assumptions behind competing social and political systems businessmen encounter in today's global marketplace. Second half examines specific case studies.

**240 Social and Political Philosophy (4) (2H)**

Introduction to major philosophical theories concerning nature of social and political communities including those offered by Plato, Aquinas, Hobbes, Locke, Mill, and Rawls. Consideration of some significant specialized problems in social and political theory including distributive justice, civil disobedience, liberty, punishment, etc.

**250 Philosophy of Mind (4)**

Mind-body problem; concept of self; human-machine relation; problem of other minds.

**260 Philosophy of Religion (4) (2H)**

Problems in nature of religion, existence and nature of God; problem of evil, immortality, and religious language.

**297T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (fall) 1st-yr tutorial studies in philosophy.

**298T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (winter) 1st-yr tutorial studies in philosophy.

**299T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (spring) 1st-yr tutorial studies in philosophy.

**301J Writing With Reason: Philosophical Issues (4) (1J)**

Prereq: jr rank, 101 or 130 or perm. Enables student to write about and study in depth some area of philosophical concern. Specific subject matter will vary with instructor and the quarter. Emphasizes subject matter (content) and writing skills (composition) in an approximately 40:60 ratio. Fulfills the junior level English composition requirement.

**310 History of Western Philosophy: Ancient (5) (2H)**

Significant ideas of representative Greek and Roman philosophers.

**311 History of Western Philosophy: Medieval and Renaissance (5) (2H)**

Augustine to Bruno and Campanella.

**312 History of Western Philosophy: Modern (5) (2H)**

Descartes to Hume and Kant.

**314 19th Century European Philosophy (4)**

Subjects selected from French, German, and British philosophers of 19th century.

**320 Symbolic Logic I (5)**

Techniques of modern symbolic logic.

**330 Ethics (5)**

Study focusing on specific philosopher, or on type of ethical or value theory.

**331 Moral Problems in Medicine (5)**

Prereq: soph rank. Philosophical investigation of complex moral problems engendered by modern medicine, e.g., death with dignity, human experimentation, allocation of scarce medical resources, birth defects, killing or letting die, informed consent, etc. Basic philosophical concepts underlying these problems explored, including autonomy, coercion, normality, naturalness, rights, justice, responsibility, personhood, etc.

**332 Philosophy of Sex and Love (4)**

Prereq: jr rank. Philosophical and evaluative investigation into subject of sexual love and Western morality. Topics include roles and relations between sexes, abortion, monogamy, sexual perversion, homosexuality, promiscuity, adultery, semantics of sex, etc.

**333 Philosophy of Literature (3)**

Prereq: jr rank. (on demand) Examines nature of fictional literature as differentiated from other types of writing. Explores philosophical ideas within specific works of fiction, concentrating on problems of translating philosophical content into literary form, interpretation, belief, truth, and artistic integrity.

**350 Philosophy of Culture (5)**

Philosophical studies of humankind as culture-creating being.

**351 Philosophy of Language (4)**

Prereq: 6 hrs in philosophy, including 120 or 320. Theories of meaning and reference and their philosophical significance, relations of meaning to verification and truth, and relationship between language and concepts.

**358 Existentialism (4)**

Prereq: 9 hrs in philosophy. Existential thought from Kierkegaard to Camus stressing such themes as freedom, existence, despair, authenticity, alienation, death, and revolt against system.

**360J Writing About Religion (4) (1J)**

Prereq: first year comp. jr rank, 160, or perm. Study of vocabulary and communication problems in written description and analysis of religious phenomena. Writing projects in various styles, from reports of personal experience to scholarly research.

**361 Old Testament (5) (2H)**

Background and development of Old Testament; its philosophical, moral, and religious significance.

**362 New Testament (5) (2H)**

Background and development of New Testament; philosophical, moral, and religious significance of beliefs of Jesus, Paul, and early Church.

**370 Hinduism (4) (2T)**

Vedic religion, Hinduism, Jainism.

**371 Buddhism (4) (2T)**

Introduction to doctrines, origins, and varieties.

**372 Islam (4) (2T)**

Introduction to basic ideas, history, and background.

**373 American Religions (4)**

Prereq: jr rank, (on demand) Christianity, Judaism, and other religions and developments in U.S.

**397T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (fall) 2nd-yr tutorial studies in philosophy.

**398T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (winter) 2nd-yr tutorial studies in philosophy.

**399T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (spring) 2nd-yr tutorial studies in philosophy.

**414 Analytic Philosophy (5)**

Prereq: 4 philosophy courses and perm prior to registration. Selected topics in contemporary Anglo-American philosophy from Moore to Wisdom.

**416 Philosophy of Science (5)**

Prereq: 320. Selected problems in logic and methodology of sciences.

**417 Philosophy of Logic (5)**

Prereq: 320. (on demand) Philosophical problems connected with formal logic and its relationship to language and reality. Topics include methodology of logic as science, analyticity and necessary truth, meaning and logical form, relationship of logic to natural language, concept of translation, and relation of logic to ontology.

**418 Plato (5)**

Prereq: 4 philosophy courses, including 310.

**419 Aristotle (5)**

Prereq: 4 philosophy courses, including 310.

**420 Symbolic Logic II (5)**

Prereq: 320. Informal and formal deductive systems, logic of relations, class logic.

**421 Proof Theory (5)**

Prereq: 320 or equiv. (on demand) Syntax and semantics of formal theories.

**422 Computability (5)**

(on demand) Algorithms, recursive functions, Turing machines, decidability.

**423 Modal and Many-Valued Logics (5)**

Prereq: 320. (on demand) N-valued logics, modal logic.

**428 Continental Rationalism (5)**

Prereq: 4 philosophy courses, including 312. (alternate yrs) Descartes, Spinoza, Leibniz.

**429 British Empiricism (5)**

Prereq: 4 philosophy courses, including 312. (alternate yrs) Locke, Berkeley, Hume.

**430 Contemporary Ethical Theory (5)**

Prereq: 4 philosophy courses, including 130, 240, 330, or 442. Significant current literature in selected topics of moral, social, political, and legal philosophy.

**431 History of Esthetic Theory (5)**

Prereq: 4 philosophy courses. Readings from Plato to Dewey and relation of these theories to selected arts and recent criticism.

**432 Problems in Esthetics (5)**

Prereq: 9 hrs philosophy, literature, or art. For students interested in arts but not necessarily in issues primarily of interest to philosophers. Writings drawn from modern sources on theory of art, aesthetic criticism, creativity, truth in art, aesthetic value.

**438 Kant (5)**

Prereq: 4 philosophy courses, including 312. Kant's *Critique of Pure Reason* with attention given to his ethical theory.

**440 Contemporary Social Philosophy (5)**

Prereq: 330 or 240 or 442 and 3 other philosophy courses. Consideration of any number of various issues in contemporary social, political, and legal philosophy. Possible topics: theories of distributive justice, culpability, causality and responsibility, legal and moral rights, etc.

**442 Philosophy of Law (5)**

Prereq: 3 philosophy courses or perm. Consideration of nature and justification of law and examination of some specialized topics in philosophy of law, including ascription of responsibility, civil disobedience, theories of punishment, liberty, etc.

**444 Philosophy of Marxism (5)**

Prereq: 4 philosophy courses. Philosophical inquiry into classical and contemporary Marxist thought stressing Marx, Engels, Lenin, Stalin, Mao, and several contemporary Marxists such as Praxis group of Yugoslavia.

**448 Pragmatism (5)**

Prereq: 4 philosophy courses. Pierce, James, Dewey, and other American thinkers.

**450 Theory of Knowledge (5)**

Prereq: 4 philosophy courses, including 312. Critical examination of various views of what knowledge is and how it is attained.

**451 Metaphysics (5)**

Prereq: 4 philosophy courses, including 310 or 312. Basic alternative conceptions of world, and such topics as nature of substance, causality, self, freedom, space, and time.

**452 Myth and Symbolism (5)**

Prereq: 4 philosophy courses. Characteristic expressions of thought in primitive societies and theories concerning primitive mentality.

**458 Contemporary European Philosophy (5)**

Prereq: 4 philosophy courses, including 358 and 468. Phenomenology and existentialism as seen in Husserl, Heidegger, Scheler, Hartman, Dilthey, Cassirer, Gebser, Ingarden, Sartre, Camus, Merleau-Ponty, and Ricoeur.

**460 Contemporary Religious Thought (5)**

Prereq: 4 philosophy courses. (on demand) Representative thinkers such as Tillich, Buber, and others.

**468 Phenomenology (5)**

Prereq: 4 philosophy courses, including 312. Method and philosophy of phenomenological movement from Husserl to Merleau-Ponty.

**475 Chinese Philosophy (5)**

Prereq: 4 philosophy courses. Major Chinese philosophers and schools of thought from earliest times to present.

**476 Indian Philosophy (5)**

Prereq: 4 philosophy courses, including 370. (on demand) Classical Hinduism.

**477 Buddhist Philosophy (5)**

Prereq: 4 courses, including 371. (on demand) Abhidharma, Madhyamika, Yogacara, Zen, and other philosophical doctrines of Buddhism.

**478 African Philosophy (5)**

Prereq: jr rank. Critical examination of question, debated today among African philosophers, whether traditional African thought systems should be regarded and developed as *philosophical* systems, and survey of most significant of these thought systems.

**491 Seminar in Philosophy (1-15, max 15)**

Prereq: 5 philosophy courses. Selected problems.

**497 Independent Reading (1-9, max 12)**

Prereq: perm of chair.

**497T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (fall) 3rd-yr tutorial studies in philosophy.

**498T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (winter) 3rd-yr tutorial studies in philosophy.

**499 Senior Thesis (3-15)**

Prereq: perm. Must be enrolled in each of three senior quarters to achieve honors in philosophy. Research and writing of long philosophical paper.

**499T Philosophy Tutorial (1-10)**

Prereq: Honors Tutorial College students only. (spring) 3rd-yr tutorial studies in philosophy.

## PHYSICAL THERAPY (PT)

**259A Introduction to Physical Therapy (2)**

Designed for those students who are considering physical therapy as a career option. Presentations and topics of discussion will attempt to bring the student to an understanding of the physical therapy profession and the requirements for entry into the profession.

**410 Human Anatomy and Dissection (7)**

Prereq: perm. Detailed study of gross structures of extremities and body wall with emphasis on musculoskeletal, neuromuscular, respiratory, and cardiovascular structures. Relationships of structure to normal and abnormal function stressed. Includes surface inspection, palpation, analysis of radiographic studies, and dissection.

**425 Principles of Clinical Teaching (4)**

Prereq: perm. Application of educational theories, practices, and procedures to development, implementation, and evaluation of instructional programs for patients, families, community groups, physical therapy students, and health-care providers. Emphasis placed on unique demands imposed on education by consumer's health-care needs, clinical environment, and health-care organization and delivery.

**426 Research Seminar (4)**

Prereq: PSY 121. Application of research principles and procedures to critical analysis of physical therapy-related research literature; identification and development of a researchable problem in physical therapy.

**431 Professional Role Issues (4)**

Prereq: perm. Major philosophical and substantive issues confronting physical therapists and other professionals involved in health care delivery discussed. Includes historical perspectives, ethics, accreditation, legal requirements, and roles and responsibilities of various health-care disciplines. Course content developed around role problems.

**441 Community Practice Problems I (3)**

Prereq: perm. Participation in planning, development, delivery, and evaluation of patient care and administrative, educational, and consultative services in physical therapy or community health. Students assigned to variety of community-based physical therapy units and health-care agencies.

**442 Community Practice Problems II (3)**

Continuation of 441. See 441 for description.

**443 Community Practice Problems III (3)**

Continuation of 442. See 441 for description.

**444 Community Practice Problems IV (3)**

Continuation of 443. See 441 for description.

**446 Community Practice Problems V (3)**

Continuation of 444. See 441 for description.

**447 Clinical Practicum I (5)**

Prereq: completion of all summer and fall qtr requirements, perm. (winter break) Concentrated, supervised course of study in clinical education facility wherein students are given opportunity to develop clinical skills in planning, development, implementation, and evaluation of patient care services.

**448 Clinical Practicum II (7)**

Prereq: completion of all first-year program requirements, perm. Participation in planning, development, implementation, and evaluation of patient care and educational, administrative, and consultative services in affiliated physical therapy service units.

**449 Clinical Practicum III (12)**

Prereq: completion of all required courses. Participation in planning, development, implementation, and evaluation of patient care and educational, administrative, and consultative services in variety of affiliated community-based physical therapy service units and health-care agencies.

**450 Introduction to Clinical Problems (4)**

Prereq: perm. Introductory course in which students learn how to utilize biomechanical principles in selected aspects of patient care, i.e., transfers and positioning, assessment of joint range of motion and muscle function, and basic massage techniques. Principles and techniques will be applied to simple patient problems.

**451 Musculoskeletal Problems I (5)**

Prereq: 410, perm. Presentation of patient problems involving musculoskeletal dysfunction commonly seen in physical therapy. Each problem incorporates content from basic, social, and clinical sciences, as well as physical therapy arts and sciences. Lecture, laboratory, and clinical experiences assist students in solving each problem.

**452 Musculoskeletal Problems II (5)**

Prereq: 410, 451, perm. Continuation of 451. Emphasizes musculoskeletal problems associated with hereditary factors, environmental factors, or disease.

**453 Musculoskeletal Problems III (4)**

Prereq: 452. Emphasizes common musculoskeletal problems of the vertebral column, pelvis, and temporomandibular joint. Knowledge, skills, and problem solving capabilities are developed in a manner consistent with that encountered in clinical practice. Each unit includes anatomy, pathological anatomy, pathophysiology, arthrokinematics, and continued refinement and development of evaluation and treatment techniques. Therapeutic exercise and physical modalities will be presented, analyzed, and applied to clinical problems.

**454 Respiratory Problems (4)**

Prereq: 410, 451, 452. Presentation of patient problems involving respiratory dysfunction commonly seen in physical therapy. Each problem incorporates content from basic, social, and clinical sciences and physical therapy arts and sciences. Lecture, laboratory, and clinical activities assist students in solving each problem.

**455 Neuromuscular Problems I (5)**

Prereq: 410 or perm. Presentation of patient problems involving neuromuscular dysfunction associated with trauma or pathology of spinal or peripheral structures. Content of each problem incorporates basic, social, and clinical sciences and physical therapy arts and sciences. Lecture, laboratory, and clinical activities assist students in solving each problem.

**456 Neuromuscular Problems II (5)**

Prereq: 455 or perm. Physical therapy evaluation, treatment, and documentation of developmental patient problems related to central nervous system dysfunction in infants, children, and adolescents. Lecture, laboratory, and clinical laboratory experiences help students in solving each problem.

**457 Cardiovascular Problems (4)**

Prereq: 410, 451, 452, 454. Presentation of patient problems involving cardiovascular dysfunction commonly seen in physical therapy. Each problem incorporates basic, social, and clinical sciences and physical therapy arts and sciences. Lecture, laboratory, and clinical activities assist students in solving each problem.

**458 Topics in Cardiovascular Evaluation (3)**

Designed to provide students with knowledge and skills required to interpret and perform complex cardiovascular evaluation techniques.

**459 General Medical Surgical Problems (4)**

Prereq: 410, 451, 452. Presentation of general medical surgical patient problems commonly seen in physical therapy. Each problem incorporates basic, social, and clinical sciences and physical therapy arts and sciences. Lecture, laboratory, and clinical activities assist students in solving each problem.

**460 Critical Analysis of Physical Therapy Evaluation Procedures (3)**

Prereq: PSY 121. Designed to give student physical therapists skills necessary to analyze physical therapy management and evaluation procedures. Students apply analytic skills to problems related to reliability, validity, accuracy, and precision of physical therapy evaluation procedures used in assessment of musculoskeletal, cardiopulmonary, and neuromuscular patient problems. Problems related to effectiveness of programs designed to address patient problems analyzed.

**490 Independent Study (1-4)**

Prereq: perm. Supervised study of selected topics in or related to physical therapy.

**493 Neuromuscular Problems III (5)**

Prereq: 455, 456. Physical therapy evaluation, treatment, and documentation of complex patient problems related to central nervous system dysfunction in adults. Lecture, laboratory, and clinical laboratory experiences help students in solving each problem.

## PHYSICS AND ASTRONOMY

The minimum requirement for the A.B. degree with a major in physics is 36 quarter hours, including a sequence of beginning courses, either 251, 252, 253, and 351, 352 or 201, 202, 203 and 315, 351, 352 (credit is not granted for both sequences). This degree is recommended for students who (1) want a general education with emphasis on physics; (2) have plans for further education or employment in an interdisciplinary area or desire a dual major in physics and chemistry, zoology, geological sciences, etc.; or (3) want to teach physics in high school. The requirements for option (3), for example, may be met by completing the physics major program listed under the College of Education.

The minimum requirement for the B.S. degree with a major in physics is 56 quarter hours. This must include a sequence of beginning courses of 251, 252, 253. In addition, the following advanced courses are specifically required: 210, 272, 273, 311, 312, 351, 352, 371, 372, 373, 411, 427, 428. The requirements in mathematics are 263A, 263B, 263C, 263D, 340, 440, 441. The Department of Physics and Astronomy also requires 12 quarter hours of natural sciences other than physics and mathematics for the B.S. degree.

The minor in physics consists of a minimum of 30 hours with 10 hours at or above the 300 level.

Students who plan to enter graduate study will find a recommended curriculum listed under Preparation for Advanced Training in Physics in the College of Arts and Sciences' Special Curricula section. An applied physics program and programs for students interested in astronomy or meteorology are also listed under this section. Students planning to enter graduate study are urged to complete the foreign language requirement in German, French, or Russian. For English composition requirements, see the College of Arts and Sciences section.

Selected students may enroll in the physics tutorial program through the Honors Tutorial College. Students in this program have the option of taking engineering physics for which a curriculum is listed under the Honors Tutorial College section.

Completion of the requirements for either the A.B. or B.S. degree program above completes the Arts and Sciences College requirement of at least nine hours in the major at the junior-senior level.

All students interested in pursuing any of the physics programs described above should contact the chair of the Department of Physics and Astronomy.

## Astronomy

**100 Survey of Astronomy (4) (2N)**

Non technical course requiring no mathematics background. Topics covered: origins and history of astronomy; nature of astronomical observations and instruments; solar system; comets, meteors, and meteorites; sun and stars; origin and evolution of stars; structure of our galaxy; pulsars; quasars; galaxies; expanding universe; cosmology. Also listed as PSC 100. 4 lec.

**100D Moons and Planets: The Solar System (4) (2N)**

Look at solar system, sun, moons, and planets, through eyes of modern science. Space program, Apollo to present, and what we have learned from it. Selected readings and NASA films. Also listed as PSC 100D. 4 lec.

**140 Observational Astronomy Laboratory (1) (2N)**

Experience with telescopes and locating stars, planets, and deep-sky objects in the night sky. Also covers major constellations, seasonal variations, lunar cycles, and, when appropriate, eclipses and comets. Meets at night only. Also listed as PSC 140. 2 lab.

**300 The Solar System (3)**

Prereq: PHYS 352. Origin of the solar system. The sun and the solar wind. Planetary surfaces, interiors, atmospheres, and magnetism. Tides and their consequences.

**301 Theoretical Astronomy: Stellar Evolution (3)**

Prereq: PHYS 352. Origin and evolution of stars. Properties of the interstellar medium and main-sequence stars. Evolution of giants, novae, supernovae, white dwarves, and neutron stars.

**302 Theoretical Astronomy: Galaxies and Cosmology (3)**

Prereq: 301 and PHYS 352 or perm. Structure of our own galaxy, differential rotation, nature and origin of the spiral arms, the interstellar medium. Physical properties of galaxies and their distribution in space. Active galaxies and quasars, supermassive black hole model of active galactic nuclei. Expansion of the universe and Hubble's law, methods of measurement of cosmic distances. General relativity theory and the large scale structure of the universe. Theories of the origin of the universe, the hot big-bang model, observational evidence, the microwave background radiation, cosmic nucleosynthesis.

**310 Astronomy Laboratory (1)**

Prereq: PHYS 352. Repeated Enrollment. Telescope observations and other laboratory studies dealing with astronomy.

**350 Celestial Mechanics (4)**

Prereq: 301, and MATH 340. (on demand) Differential equations of planetary motion: vector treatment of 2-body problem; determination of orbits of planets and satellites.

**450 Studies in Astronomy (1-3, arranged)**

Prereq: 302.

## Physical Science

**100 Survey of Astronomy (4) (2N)**

Nontechnical course requiring no mathematics background. Topics covered: origins and history of astronomy; nature of astronomical observations and instruments; solar system; comets, meteors, and meteorites; sun and stars; origin and evolution of stars; structure of our galaxy; pulsars; quasars; galaxies; expanding universe; cosmology. Also listed as ASTR 100. 4 lec.

**100D Moons and Planets: The Solar System (4) (2N)**

Look at solar system, sun, moons, and planets, through eyes of modern science. Space program, Apollo to present, and what we have learned from it. Selected readings and NASA films. Also listed as ASTR 100D. 4 lec.

**101 Physical World (4) (2N)**

Designed for nonscience majors. Fundamental ideas of measurement, motion, energy, electricity and magnetism, heat, atomic and nuclear physics. Introduction to relativity and quantum phenomena. 4 lec.

**101L Physical World (5) (2N)**

Designed for nonscience majors. Fundamental ideas of measurement, motion, energy, electricity and magnetism, heat, atomic and nuclear physics. Introduction to relativity and quantum phenomena. 4 lec, 2 lab.

**105 Color, Light, and Sound (4) (2N)**

Designed for nonscience majors. Physical nature of light and sound, including transmission, absorption, reflection, interference, and resonance. Applications include analysis of musical instruments, acoustics, optical systems, perception of color and sound. 4 lec.

**105L Color, Light, and Sound (5) (2N)**

Designed for nonscience majors. Physical nature of light and sound, including transmission, absorption, reflection, interference, and resonance. Applications include analysis of musical instruments, acoustics, optical systems, perception of color and sound. 4 lec, 2 lab.

**111 The Metric System (1)**

Introduction to International (Metric) System of Units (SI) through lecture and laboratory experience. Topics include: history of and rationale for SI; SI and its rules for use; metric computation and conversion techniques. Not offered on Athens campus.

**140 Observational Astronomy Laboratory (1) (2N)**

Experience with telescopes and locating stars, planets, and deep-sky objects in the night sky. Also covers major constellations, seasonal variations, lunar cycles, and, when appropriate, eclipses and comets. Meets at night only. Also listed as ASTR 140. 2 lab.

## Physics

**201 Introduction to Physics (4) (2N)**

(fall, winter) 1st course in physics; open to students from all areas. Students should have high school level algebra and trigonometry, but no calculus required. Recommended for students in liberal arts, architecture, industrial technology, botany, geological sciences, and premedicine. Mechanics of solids and liquids, waves and sound. 3 lec, 2 lab.

**202 Introduction to Physics (4) (2N)**

Prereq: 201. (winter, spring) Continuation of 201. See 201 for description. Includes electricity, magnetism, heat, thermodynamics, and light. 3 lec, 2 lab.

**203 Introduction to Physics (4) (2N)**

Prereq: 202. (spring, fall) Continuation of 201 and 202. See 201 for description. Includes relativity, quantum, atomic, and nuclear physics. 3 lec, 2 lab.

**210 Physics Seminar (1)**

Prereq: physics major or perm. Provides overviews of classical mechanics, relativity, and contemporary physics. Films and current science news will be used to search for student interests in future study.

**251 General Physics (5) (2N)**

Prereq: MATH 263A. Classical physics with calculus and vectors. Newtonian mechanics, rotational dynamics, gravitation. 3 lec, 2 lab, 1 recit.

**252 General Physics (5) (2N)**

Prereq: 251 and MATH 263B. Classical physics with calculus and vectors. Wave phenomena, optics, thermal properties of matter, heat, and thermodynamics. 3 lec, 2 lab, 1 recit.

**253 General Physics (5) (2N)**

Prereq: 252. Classical physics with calculus and vectors. Electricity and magnetism. 3 lec, 2 lab, 1 recit.

**270 Special Studies (1-4)**

Prereq: perm. Special studies in physics under supervision of faculty member.

**272 Electronics Laboratory (2)**

Prereq: 253 and phys major or perm. (winter) Circuit analysis, electronic measurements, semiconducting devices and instrumentation from DC to microwaves. 4 lab.

**273 Electronics Laboratory (2)**

Prereq: 272 and phys major or perm. (spring) Circuit analysis, electronic measurements, semiconducting devices, and instrumentation from DC to microwaves. 4 lab.

**297T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (fall) 1st-yr tutorial studies in physics.

**298T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (winter) 1st-yr tutorial studies in physics.

**299T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (spring) 1st-yr tutorial studies in physics.

**303 Digital Computing Methods in Physics (4)**

Prereq: phys major or perm. Practical computer programming (FORTRAN, etc.) with special emphasis on problems in physics. 4 lec.

**311 Mechanics (4)**

Prereq: 253 or 315; MATH 340. (fall) Fundamentals of physical mechanics using vector analysis and ordinary differential equations. Particle dynamics, accelerating reference systems, central forces and celestial mechanics.

**312 Mechanics (4)**

Prereq: 311. (winter) Continuation of 311. Many-particle systems, rigid body dynamics, Lagrangian methods, and small oscillations.

**315 Intermediate Physics for Scientists and Engineers (4)**

Prereq: 201, 202, 203 or equiv and calculus. (winter) Review of mechanics and general physics with emphasis on application of calculus and vector analysis. Intended for students who have had thorough noncalculus physics course and approximately 1 yr of calculus. PHYS 201, 202, 203 followed by 315 accepted as equiv to calculus-level physics: PHYS 251, 252, 253. 3 lec, 1 recit.

**316 Contemporary Physics for Scientists and Engineers (3)**

Prereq: 253, 315, or EE 321. Introduction to quantum theory and relativity; selected topics in atomic, nuclear, and solid state physics. Intended to follow classical physics with calculus: either 253 (252 for electrical engineering majors) or 315. 3 lec.

**351 Modern and Quantum Physics (4)**

Prereq: 253. Introduction to relativity and quantum theory. Particle and wave propagation, 3-dimensional hydrogen atom.

**352 Modern and Quantum Physics (4)**

Prereq: 351. Quantum effects, nuclear and particle physics, statistical physics, molecular and solid state physics; astrophysics, general relativity, and cosmology.

**371 Intermediate Laboratory (Electrons) (2)**

Prereq: 352 or perm. Fundamental experiments on electron properties including charge and mass, wave properties, atomic binding, spin and conduction.

**372 Intermediate Laboratory (Photons) (2)**

Prereq: 352 or perm. (winter) Experiments in optics, lasers, x-rays, and spectroscopy. 4 lab.

**373 Intermediate Laboratory (Nucleons) (2)**

Prereq: 352 or perm. (spring) Nuclear decay modes and  $\alpha$ ,  $\gamma$ ,  $\beta$ -ray spectroscopy. Nuclear reactions and scattering. Principles of operation of  $\alpha$ ,  $\beta$ ,  $\gamma$  and neutron detectors and data acquisition systems.

**397T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (fall) 2nd-yr tutorial studies in physics.

**398T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (winter) 2nd-yr tutorial studies in physics.

**399T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (spring) 2nd-yr tutorial studies in physics.

**411 Thermodynamics (4)**

Prereq: 253 or 315, MATH 340. (fall) 1st and 2nd laws of thermodynamics, phase changes, and entropy. Temperature, thermodynamic variables, equations of state, heat engine. 3 lec.

**412 Kinetic Theory and Statistical Mechanics (4)**

Prereq: 411. (winter) Kinetic theory, transport phenomena of gases, and introduction to classical and quantum statistics. 3 lec.



**420 Acoustics (3)**

Prereq: 312 or perm. MATH 340. (spring, odd yrs) Vibration, sound radiation, sound propagation, and practical aspects of sound. 3 lec.

**423 Geometrical and Physical Optics (4)**

Prereq: 253, MATH 340, or perm. Reflection, refraction, lenses, polarization, birefringence, interference, diffraction, coherence, and selected introductory topics in modern optics. 4 lec.

**427 Electricity and Magnetism (3)**

Prereq: 253 or 315; MATH 340 and 440. (fall) Circuits and electric and magnetic fields. Topics on field sources, potentials, Gauss' law, polarization and dielectrics, magnetic induction. 3 lec.

**428 Electricity and Magnetism (4)**

Prereq: 427. (winter) Electric and magnetic fields. Topics on magnetic potentials, magnetic forces, Faraday law, magnetic materials, capacitance and inductance, energy of charge and current distributions, time-varying current. 3 lec.

**429 Electromagnetism and Relativity (3)**

Prereq: 428. (spring) Advanced topics in electromagnetism; Maxwell's equations and electromagnetic waves; special relativity and Lorentz transformation. 3 lec.

**431 Electronics Laboratory (3)**

Prereq: perm. Experiments in electronic measurement techniques from simple A.C. and digital circuits to microprocessors and analyzers. 6 labs.

**451 Quantum Mechanics (4)**

Prereq: 352 or perm. (fall) Origins of quantum theory, description of the hydrogen atom, formalism and solutions to Schrodinger's equation in 1 and 3 dimensions. 3 lec.

**452 Quantum Mechanics (4)**

Prereq: 451, MATH 441 or taken concurrently. (winter) Quantization of angular momentum, perturbation theory with applications to real systems, and scattering theory for measurements of atomic and nuclear systems. 3 lec.

**453 Nuclear and Particle Physics (4)**

Prereq: 352. (spring) Descriptive treatment of nuclear phenomena. Elementary theory of nucleon-nucleon interaction. Systematics of nuclear structure (shell model and collective model). Properties and interactions of fundamental particles. Devices and techniques of nuclear and high energy physics. 3 lec.

**470 Special Problems (1-4)**

Prereq: 22 hrs. Supervised research problems of limited scope in experimental and theoretical physics.

**471 Solid State Physics (4)**

Prereq: 352, 412. (spring, even yrs) Fundamental properties of solid state of matter. 3 lec.

**475 Advanced Laboratory (1 hr per sec, max 3)**

Prereq: 373 or perm. Wide selection of experiments from many areas of physics. Limit of 2 students per section. Student may select up to 3 different sections each qtr.

**490H Honors Thesis (1-6)**

Prereq: Honors tutorial students or departmental honors candidates only. Perm of director of honors studies. Supervised research work in physics, astronomy, or engineering physics. Intended for submission for undergrad honors.

**493 Undergraduate Seminar (1)**

Prereq: jr rank. Important areas of current interest in field of physics, history of physics, development of ideas in physics, and other aspects of physics.

**497T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (fall) 3rd-yr tutorial studies in physics.

**498T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (winter) 3rd-yr tutorial studies in physics.

**499T Physics Tutorial (1-15)**

Prereq: Honors Tutorial College students only. (spring) 3rd-yr tutorial studies in physics.

## POLITICAL COMMUNICATION

### Undergraduate Certificate

The colleges of Arts and Sciences and Communication jointly sponsor a certificate in political communication for students who wish to supplement their undergraduate major with an inquiry into the arena of political communication. Political communication encompasses the interactions of political figures, political interests, the press, and the public in their efforts to persuade and influence political outcomes. The program is open to any undergraduate student in the University.

### Program Requirements

To receive a certificate in political communication, a student must complete POCO 201, Introduction to Political Communication, and POCO 401, Seminar in Political Communication, as well as 22 quarter hours from among the courses listed below. No more than 2 courses from any one department can be counted toward the certificate.

A Political Communication certificate is awarded upon completion of the requirements and graduation from the University. Notation of the award is recorded on the permanent record (transcript). Students pursuing the certificate must consult with the director of the Center for Political Communication prior to the deadline for graduation to ensure that the certificate will be awarded.

### Required Courses

POCO 201 Introduction to Political Communication	3
POCO 401 Seminar in Political Communication	5

### Courses in the Curriculum

ECON 316 Economics and the law	4
ECON 430 Public Finance	4
INCO 250 Introduction to Rhetorical Theory	4
INCO 342 Communication and Persuasion	4
INCO 352 Political Rhetoric	4
INCO 430 Communication and the Campaign	5
INCO 442 Responsibilities and Freedom of Speech	4
JOUR 411 Communication Law	4
JOUR 412 Mass Media and Society	3
JOUR 464 Public Affairs Reporting	3
JOUR 471 Public Relations Reporting	5
LING 280 Language in America	5
LING 420S Linguistics and Semiotics	4
PHIL 240 Social and Political Philosophy	4
PHIL 442 Philosophy of Law	5
POLS 250 International Relations	5
POLS 304 State Politics	4
POLS 405 American Political Parties	4
POLS 406 Elections and Campaigns	4
POLS 410 Public Policy Analysis	4
POLS 415 The American Presidency	4
POLS 417 Legislative Processes	5
POLS 418 Interest Groups	4
POLS 420 Women, Law, and Politics	4
POLS 424 Intergovernmental Politics	4
POLS 476A American Political Thought	4
POLS 476B American Political Thought	4
POLS 481 Modern Political Analysis	4
POLS 490B Studies in American Public Opinion	4
PSY 304 Human Learning and Cognitive Processes	4
PSY 336 Social Psychology	4
SOC 412 Public Opinion Processes	4
SOC 413 Mass Communication	4
SOC 414 Contemporary Social Movements	4
SOC 432 Political Sociology	4
SOC 465 Social Change	4
TCOM 370 Mass Communication Theories	4
TCOM 371 Effects of Mass Communications	4
TCOM 453 Law and Regulation	4
TCOM 475 Politics and the Electronic Media	4

**201 Introduction to Political Communication (3)**

Overview of the realm of political communication, the interactions among political figures, political interests, the press, and the public. Against the background of the American political process, an investigation of those involved in that process, their relationships, and the role of mass and interpersonal communication in these relationships.

**401 Seminar in Political Communication (5)**

Prereq: 201 and completion of a minimum of four courses from the above list, or perm. A senior level research course investigating selected aspects of political communication.

## POLITICAL SCIENCE

The major requirement for the A.B. degree is a minimum of 45 hours including POLS 101 and either 102 or 103. Majors must also take at least one course at the 200 level or above in four of the following five areas: American politics, comparative politics, international relations, political theory, public administration. The distribution requirement for a minor in political science is the same as for the major but the total number of hours required is 24.

American politics includes: 304, 306, 319, 320, 323, 374, 390, 401, 402, 404, 405, 406, 409, 415, 417, 418, 420, 476A, 476B; comparative politics: 230, 331, 333, 340, 429, 432, 433, 434, 435, 438, 439, 441, 445, 446, 447A, 447B, 479; international relations: 250, 351, 354, 427, 433, 452, 455, 456, 459, 463; political theory: 270, 371, 372, 373, 374, 475, 476A, 476B, 477, 478, 479, 481, 482; public administration: 210, 310, 314, 386, 387, 409, 410, 412, 413, 424, 425, 427, 429.

**101 American National Government (4) (2S)**

Constitutional basis and development, political processes, and organization of American national government.

**102 Issues in American Politics (4) (2S)**

Concerned with administration and policy-making processes of national government in selected areas, e.g., welfare, civil rights, defense, etc.

**103 The United States in World Affairs (4) (2S)**

Introduction to major foreign policy problems confronting successive U.S. administrations in world affairs.

**210 Principles of Public Administration (4) (2S)**

*E. Baum, D. Burnier, M. Mumper.* Introduction to role and operation of public agencies in American society. Examines organization of federal, state, and local bureaucratic systems, their interrelations, and their basic principles, functions, and tasks.

**230 Comparative Politics (4) (2S)**

*J. Barnes, E. Baum.* Introduction to dynamics, structures, and comparison of contemporary political systems and processes.

**250 International Relations (5) (2S)**

*R. Bald, S. Kim, S. Washington.* Contemporary international system and major forces and conditions which affect current international politics. Special emphasis on role of conflict and need for peaceful conflict resolution.

**270 Political Theory (4) (2S)**

*F. Henderson.* Introduction to study of political theory; examination of selected political issues and theorists from philosophical perspective. Emphasis on developing one's own political values and theories.

**304 State Politics (5)**

Prereq: 101, 102, *J. Tucker.* Comparative analysis of state political systems. Emphasis on structure and process of policy making of states within federal context.

**306 Politics of Appalachia (5)**

Prereq: 101 or perm. *J. Huntley.* Introduction to Appalachia, its political patterns, and political problems, such as politics of poverty and powerlessness. Includes examination of responses to these problems by various levels of government — national, regional, state, and local.

**310 American Domestic Policy (4)**

Prereq: 101, 102, or perm. *M. Mumper.* Major issues in American domestic policy are discussed from a variety of perspectives. The origin, development, and current structures of economic and social

policy will be discussed. An analysis of these policies from a free market as well as a Marxist perspective will be provided.

**314 Organizational Theory and Politics (4)**

Prereq: 210, *D. Burnier, M. Weinberg.* Examination of public organizations. Presents major theories of organizations in public administration. Public management cases examined to illustrate major theories.

**319 Gay and Lesbian Politics (4)**

Prereq: soph rank. *R. Hunt.* Exploration of emergence and ramifications of gay political activism in Western culture. Homosexuality is examined from vantage points of religion, psychology, law, and politics.

**320 Urban Politics (5)**

Prereq: 101, 102 or perm. *D. Burnier, L. Randolph.* Examination of role of values in urban politics focusing on their relationship to urban problems, structure and functions of municipalities, urban professionalism, and alternative urban arrangements.

**323 Black Politics in the United States (4) (2S)**

Prereq: 101 & 102 or perm. Appraisal of economic and institutional structure of American society through social doctrines, enunciated by black political theorists, that serve as inspiration and ideology for black political movements. Examines sociopolitical societies in various parts of Africa and interprets black political movements in cultural, philosophical, ideological, and technological terms. Not open to those who have had AAS 323.

**331 Politics in Western Europe (4) (2S)**

*R. Bald.* Government and politics in several West European nations.

**333 Politics in the Soviet Union (4)**

*D. Williams.* Introduction to political development, ideology, institutions, and contemporary politics of U.S.S.R.

**340 The Politics of Developing Areas (4) (2T)**

*G. Hawes.* Major theories and problems of political, socio-cultural, and economic development in new states of Asia, Africa, and Latin America, with special emphasis on heritage of colonialism, struggle for independence, and political adjustments to rapid social and technological change.

**351 Current International Problems (4)**

*R. Bald, S. Kim.* Selected case studies, crises, and issues illustrating major problems of contemporary international politics.

**354 American Foreign Policy (4)**

Prereq: 103 or perm. *A. Katz.* Consideration of problems involved in formulation and execution of foreign policy. Particular emphasis on contemporary problems of American policy makers.

**371 Plato, Aristotle, and Pre-modern Political Thought (5)**

Prereq: 270 or perm. *J. Huntley.* Major figures and basic concepts characteristic of political thought in ancient and medieval periods. Emphasis on original works of Plato, Aristotle, St. Augustine, St. Aquinas and on developing one's own political values and theories.

**372 Modern Political Thought (5)**

Prereq: not open to fr. *F. Henderson, R. Hunt.* Basic philosophic conceptions of modern nation state. Utilizing original works, evolution of nation state traced through philosophical literature from its Renaissance origins. Attention focused on both formative and critical perspectives, such as those of Machiavelli, Rousseau, and Emma Goldman with emphasis upon evaluation of norms associated with modern state.

**373 Contemporary Political Thought (5)**

Prereq: not open to fr. *F. Henderson, R. Hunt.* 19th- and 20th-century political theory. Focus on such contemporary philosophical and political issues as emergence of European socialist tradition, origins of human aggression, and human alienation. Attention given to selected theorists such as Marx, Freud, Gandhi, M. Friedman, and M. Harrington.

**374 Great Jurists (4)**

Prereq: not open to fr. *F. Henderson.* Analysis of life, legal writings, and thought of prominent jurists such as Taney, Frankfurter, Harlan, Marshall, Douglas, and Learned Hand.

**386 Public Budgeting (4)**

Prereq: 210 or 411 or perm. *M. Weinberg.* Examines politics, techniques, and consequences of public budgeting processes at federal, state, and local levels.

**387 Financial Management in Government (4)**

Prereq: 210, 411 or equiv or perm. *M. Weinberg*. Examines financial aspects of state and local governments. Financial conditions of these governments discussed in conjunction with various actions governments take to deal with them.

**390 Political Workshop (10-15)**

Prereq: 101 and perm. (fall, even years) *A. Prisley*. Intensive analysis of political organizations and campaigning combined with field experience in campaigning.

**401 American Constitutional Law (4)**

Prereq: 14 hrs political science or history. *J. Gilliom*. Principles underlying American constitutional government. Consideration of leading cases with reference to interpretation of U.S. Constitution.

**402 American Constitutional Law (4)**

Prereq: 14 hrs political science or history. *J. Gilliom*. Continuation of 401. See 401 for description.

**404 Civil Liberties (4)**

Prereq: jr or sr rank. *F. Henderson*. Examination of selected civil liberties issues such as freedom of expression, human and political equality, rights of criminally accused, and rights of indigent.

**405 American Political Parties (4)**

Prereq: 11 hrs. *A. Prisley*. Origin, growth, organization, and methods of parties; suffrage, nominations, and elections; role of parties in democracy.

**406 Elections and Campaigns (4)**

Prereq: 101. *P. Richard*. Examines nature of voter and rationality of voter decisions; impact of campaigns and their influence on election outcomes; techniques used in political campaigns; and role of elections in American society.

**408 Urban Public Administration (4)**

Prereq: 320 or perm. Examines administration of urban programs. Focuses on agency-client relationships, professionalism, and public delivery.

**409 Criminal Procedure (5)**

Prereq: 11 hrs or perm. *T. Eslocker*. Role, function, and problems of American judicial, prosecutory, policing, and correctional systems in political process. Crime and law as functions of social and political systems. Examination of relationship of law and social change in industrialized, urbanized, and technical society.

**410 Public Policy Analysis (4)**

Prereq: 101-102. *E. Baum, D. Burnier, M. Mumper*. Analysis of policy process: formulation, implementation, and evaluation. Examines policy areas such as energy, health, economic development.

**412 Public Personnel Administration (4)**

Prereq: 210 or perm. *E. Baum*. Philosophy, problems, and procedures of public personnel management: recruitment, training, promotion policies, position classification, and employer-employee relations.

**413 Administrative Law (5)**

Prereq: 11 hrs. Organization, functions, and procedures of selected national regulatory agencies; principles affecting administrative discretion, administrative power over private rights, enforcement, and judicial control of administrative decisions.

**415 The American Presidency (4)**

Prereq: 11 hrs. *M. Mumper*. Analysis of office of national chief executive and its place in American political system. Attention given to constitutional status and powers, functional development, and interrelationship of person and office.

**417 Legislative Processes (5)**

Prereq: 11 hrs. *P. Richard*. Explores legislative process and policy, primarily at national level. Examines influence of interest groups, constituencies, political parties, executive branch, and organizational structure of Congress on legislative outcomes.

**418 Interest Groups in American Politics (5)**

Prereq: 11 hrs. *D. Burnier*. Organization and tactics of pressure groups and their impact on policy-making process.

**420 Women, Law, and Politics (4)**

Prereq: jr rank or perm. *P. Richard*. Focuses on political and legal position of women in U.S. Covers women's legal status, feminist movement, current issues, and public policy responses concerning women's position such as Equal Rights Amendment, marriage and divorce laws, affirmative action, abortion, and pay equity.

**424 Intergovernmental Relations in the U.S. (4)**

Prereq: 411 or perm. *D. Burnier*. Examines intergovernmental fiscal patterns between federal-state-local governments and impact of fiscal transfers on local budgeting and finance administration. Includes analysis of nonfiscal patterns such as federal program requirements, their impact on local administrative processes, and other pressures on local budgeting and finance.

**425 Environmental and Natural Resource Politics and Policy (4)**

*N. Manring*. An in-depth examination of major environmental and natural resource problems facing policy makers and society today and the politics of addressing these problems. Topics covered include air and water pollution, energy development, and land use.

**427 Formulation of American Foreign Policy (4)**

Prereq: 103 or 354 or perm. *A. Katz*. Covers institutional and administrative as well as political and more informal processes whereby foreign policy decisions are formulated and implemented in U.S.

**429 Comparative Public Administration (4)**

Prereq: 210 or 230 or perm. *E. Baum, D. Williams*. Examines and compares characteristics of public administrative systems in various national political settings.

**432 Policy Making in the U.S.S.R. (5)**

Prereq: 333 or course in Soviet history or perm. *D. Williams*. Examination of how Soviet leadership deals with number of major domestic problems.

**433 Soviet Foreign Policy (5)**

Prereq: 333 or perm. *D. Williams*. Analysis of foreign policies of U.S.S.R. Historical, ideological, strategic, and other influences covered.

**434 Government and Politics of Latin America (4)**

Prereq: jr or sr rank. *T. Walker*. Political systems of Latin America. Emphasis on power relationships and political obstacles to change in contemporary Latin America.

**435 Revolution in Latin America (4)**

Prereq: jr or sr rank. *T. Walker*. Revolution as theoretical concept and as practical reality in several Latin American countries. Special emphasis on Cuban and Nicaraguan revolutions.

**438 Government and Politics of Germany (4)**

Prereq: 11 hrs or perm. *R. Bald*. Major political processes, personalities, and institutions of contemporary West Germany, including key foreign policy issues.

**439 Politics in France (4)**

Prereq: 11 hrs or perm. *J. Barnes*. Major political processes, personalities, ideas, and institutions of modern France.

**441 Government and Politics of Africa (4)**

Prereq: 8 hrs political science or history. *S. Washington*. Development and structure of modern African states with emphasis on political processes in tropical Africa.

**445 Government and Politics of Japan (4)**

Prereq: 11 hrs of political science or Asian history. Political institutions and processes of Japan with emphasis on developments since 1945.

**446 Government and Politics of China (4)**

Prereq: 11 hrs of political science or Asian history. Political institutions and processes and major political developments in modern China.

**447A Government and Politics of Southeast Asia (4)**

Prereq: 11 hrs political science or history. *G. Hawes*. From ancient empires to Western colonial rule, rise of nationalism, and arrival of independence in post WW II period.

**447B Government and Politics of Southeast Asia (4)**

Prereq: 11 hrs political science or history. *G. Hawes*. Continuation of 447A but can be taken independently. Period of independence since WW II.

**450H Honors in Political Science (5, max 20)**

Prereq: acceptance in departmental honors program. Seminar on selected aspects of political science and approaches to study of politics to be followed by research for honors thesis.

**452 Advanced International Relations (5)**

Prereq: 250 or perm. *S. Kim*. In-depth analysis of various aspects of international relations including major theoretical approaches to study of international relations.

**455 International Law (4)**

Prereq: 250 or perm. *S. Kim*. Role of international law in interstate relations and international organization.

**456 International Organizations (5)**

Prereq: 250. *S. Kim*. Analysis of nature, development, structure, and functions of international organizations with particular emphasis on United Nations.

**459 Arms Control and Disarmament (4)**

Prereq: 11 hrs or perm. *R. Bald*. Examines military force in nuclear age with special emphasis on strategy of nuclear deterrence; history of disarmament negotiations since WW II; arms control agreements; and case studies in current U.S.-Soviet arms control negotiations.

**463 The United States and Africa (5)**

Prereq: 103 or 250 or 354. *E. Baum*. Origins and nature of American relations with African states, with emphasis on current American interests and policy.

**464 Africa and the O.A.U. (3)**

Prereq: one course Africa or International. *S. Washington*. Examination of the relationship between African states and the Organization of African Unity. Includes foreign policies of selected African states and consideration of current issues in Africa. Includes participation in the annual Inter-University Simulation of the O.A.U.

**464W Simulation Portion of POLS 464 (2)****475 Studies in Political Thought (5)**

Prereq: 1 course in political thought or perm. *F. Henderson, R. Hunt*. Selected topics in political theory; e.g., anarchism, socialism, democratic theory, technology and politics, etc. Consult department for information pertaining to current course description and schedule.

**476A American Political Thought (4)**

Prereq: 11 hrs of political science or history. *A. Pristley*. Origin and development of political ideas from colonial period through slave controversy.

**476B American Political Thought (4)**

Prereq: 11 hrs of political science or history. *A. Pristley*. Continuation of 476A but can be taken independently. Begins with Social Darwinism and concludes with contemporary political ideas in America.

**477 Legal Theory and Social Problems (4)**

Prereq: 12 hrs political science or perm. *F. Henderson*. Examination of legal reasoning and normative values of judges, lawyers, legal theorists, and administrative agencies in shaping legal solutions to contemporary social problems. Emphasis on developing one's own political, legal, and philosophical values.

**478 Feminist Political Theories and Movements (5)**

Prereq: jr rank or perm. *J. Huntley*. Explores issues of power, powerlessness, oppression, and transcending oppression. Views feminism as human rights movement. Topics: origins and history of sexism and feminism, classic treatises of feminist political theory, contemporary theories from conservative to anarchist, visions of post-sexist futures, movement strategies and tactics, practical applications.

**479 Latin American Political Thought (4)**

Prereq: jr or sr rank. *T. Walker*. Evolution of Latin American political thought from conquest to present. Major emphasis on 20th-century movements such as Democratic Left, Progressive Catholic Left, and Marxist Revolutionary Left.

**481 Modern Political Analysis (4)**

Prereq: 20 hrs, perm. *D. Dabelko*. Examination of problems of knowledge in social sciences with particular emphasis on political science. Analysis of major theories or approaches developed in political science recently.

**482 Quantitative Political Analysis (5)**

Prereq: 481 or perm. *D. Dabelko*. Designed to show relevance of scientific research techniques to study of politics.

**483 Statistical Package for the Social Sciences (4)**

Prereq: PSY 121 or POLS 482 or their equiv. *D. Dabelko*. Designed to introduce social science students, with some statistical background, to the use of the microcomputer for data analysis. Although the focus is the structure and syntax of SPSS/PC, fundamental data analysis problems will be discussed in the context of computer applications.

**484 Management Skills for Public Administration (4)**

*E. Baum*. Practicum designed to introduce students to several management skills needed for success in public administration and to permit them to apply these skills in a classroom setting.

**490 Studies in Political Science (3-5)**

Prereq: 11 hrs, perm. Intensive study of special topics in field of political science, including American government and politics, comparative government, international relations, political theory, and public administration.

**492A-E Research in Political Science (1-5)**

Prereq: 18 hrs, perm of inst, max 20 hrs in 492 ABCD or E. Research in selected sub-fields of political science; international relations, American politics, comparative government, public administration, political theory. See quarterly schedule of classes for registration information.

**494A-Z Workshops in Selected Topics (1)**

Prereq: jr or sr rank. Workshop in selected topics.

**495 Public Affairs Internship (1-15)**

Prereq: perm only. *N. Manning*. Provides qualified students with opportunity to learn through working in selected public and private agencies.

## PRODUCTION/OPERATIONS MANAGEMENT

**310 Production/Operations Management (4)**

Prereq: QBA 201 or equiv and jr rank. Introduction to the management of operations in manufacturing and service industries with emphasis on identification of key problems in the areas of design, planning, and control. The utility of various models and quantitative methods in addressing the problems will be illustrated. It is assumed that students will have a background in economics, accounting, business law, and statistics equivalent to ECON 104, ACCT 202, BUSL 255, and QBA 201.

**411 Production/Operations Planning and Control (4)**

Prereq: 310 and perm. Details of methodologies and quantitative techniques used in planning and control phases in production/operation are emphasized.

**412 Production/Operations Management Problems (4)**

Prereq: 310 and QBA 314. Analysis of production management problems in various industries and technologies.

**497 Independent Research (1-4)**

Prereq: Written proposal and perm. Independent research. Course content determined by professor and student.

**498 Internship (1-4)**

Prereq: perm.

## PSYCHOLOGY

The Department of Psychology offers both a major and a minor program. The major requirement for the A.B. degree in psychology consists of a minimum of 50 quarter hours and a maximum of 72 hours. PSY 101, 121, and 226 are required. In addition, a minimum of two courses is required from each of the following four areas: (A) Developmental: 273, 275, 315, 374, 376, 378, 470, 490\*; (B) Experimental: 201, 203, 212, 241, 304, 305, 307, 308, 314, 327, 490\*; (C) Clinical: 233, 332, 351, 380, 430, 490\*; (D) Social-Organizational: 261, 310, 335, 336, 337, 361, 362, 490\*. At least four courses must be completed at the 300 level or above. PSY 321 and 418 are highly recommended for all psychology majors, particularly those who plan to attend graduate school.

The minor in psychology consists of a minimum of 28 hours with at least two courses at the 300 level or above. PSY 101 is required. In

addition, at least one course is required from each of the following four areas: (A) Developmental: 273, 275, 315, 374, 376, 378, 470, 490\*; (B) Experimental: 121, 201, 203, 212, 226, 241, 304, 305, 307, 308, 314, 327, 490\*; (C) Clinical: 233, 332, 351, 380, 430, 490\*; (D) Social/Organizational: 261, 310, 335, 336, 337, 361, 362, 490\*.

In addition to the regular major, a psychology-prephysical therapy major also is available. Required courses are listed under Preparation for Physical Therapy in the Arts and Sciences Special Curricula section of this catalog.

For qualified students, the department offers both a departmental honors program and an honors tutorial program. General descriptions of these two programs may be found in the Honors Tutorial College section of this catalog. A detailed description of the psychology honors program is available from the Department of Psychology. Students should apply to the assistant chair for undergraduate affairs for admission to departmental honors. A detailed description of the psychology honors tutorial program is available from either the department or the Honors Tutorial College. Students should apply to the Honors Tutorial College for admission to the psychology tutorial program.

Requirements for all psychology programs are structured to provide students with exposure to several areas of psychology, while providing latitude in selecting courses to fit students' needs and interests. Students are encouraged to consult their academic advisors early in their programs to plan appropriate course selections. Early consultation with an advisor is particularly recommended for students who are considering graduate work in psychology.

At the graduate level, the department offers doctoral programs in clinical, experimental, and industrial-organizational psychology and a master's program in experimental psychology. Students who are interested in pursuing a graduate degree in the department may receive a brochure and additional information about the graduate programs from the assistant chair for graduate affairs.

\*490 seminars that apply to these area requirements are approved by the assistant chair for undergraduate affairs when the seminar is offered. Some 490s do not apply to any area.

### 101 General Psychology (5) (2S)

Introduction to psychology. Survey of topics in experimental and clinical psychology including physiological bases of behavior, sensation, perception, learning, memory, human development, social processes, personality, and abnormal behavior.

### 121 Elementary Statistics for the Behavioral Sciences (5) (1M)

Prereq: Tier 1 math placement or MATH 101. Measures of central tendency, variability, correlation; sampling distributions and statistical inference; simple tests of hypotheses. No credit awarded if QBA 201 has been taken.

### 190 Workshops in Applied Psychology (1-2, max 5)

Workshops on specific topics in applied psychology, offered yearly, carrying predetermined alphabetical designations (e.g., 190A). Students seeking academic credit must complete satisfactorily written project determined by instructor. Graded credit/no credit.

### 201 Sensation and Perception (4)

Prereq: 101. Sensory and perceptual processes in vision, audition, somesthesia, gustation, olfaction, and kinaesthesia. Theory and research on perceptual phenomena with an emphasis on visual and auditory modalities, including perception of objects, space, and events; effects of person variables on perception; perceptual development.

### 203 Learning (4)

Prereq: 101 and 121. Experimental investigation of classical and instrumental conditioning, discrimination learning, generalization, related phenomena.

### 212 Physiological Psychology (4)

Prereq: 101, recommend 1 ZOOL course. Physiological mechanisms involved in perception, movement, motivation, learning, emotions, and mental disorders. Anatomy, physiology, and chemical activities of cells in the nervous and endocrine systems. Research approaches for studying interactions between physiology and behavior.

### 226 Experimental Psychology (4)

Prereq: 101 and 121. Training in scientific methods and techniques of modern experimental psychology with individual reports of experiments.

### 231 Psychology of Adjustment (4)

Prereq: 101. Dynamics, development, and problems of human adjustment. Does not count toward meeting departmental major or minor requirements except hours.

### 233 Psychology of Personality (4)

Prereq: 101. Development and organization of personality, with evaluation of major theoretical viewpoints; research on personality structure, dynamics, and change. No credit awarded if PSY 334J has been taken.

### 241 Behavioral Measurement (4)

Prereq: 101 and 121. Tests, psychophysical methods, scaling techniques, and questionnaires. Basic criteria including reliability, homogeneity, and validity.

### 261 Survey of Industrial and Organizational Psychology (4)

Prereq: 101 and 121 or QBA 201. Survey of industrial and organizational psychology; emphasis on application of psychological theories and research to organizational situation.

### 273 Child and Adolescent Psychology (4)

Prereq: 101. Behavior from infancy through adolescence. No credit awarded if HECF 160 or EDEL 200 has been taken.

### 275 Educational Psychology (4)

Prereq: 101. Applications of psychological theories and models to educational settings (emphasis on schools). Major topics include goals of education; cognitive, social, and affective development in children; cognitive and behavioral models of learning; motivation; individual differences; effects of social class, ethnicity, gender, and cultural deprivation on learning and development; tests and evaluation. Emphasis is on the role of teachers and parents as facilitators of learning and development. No credit awarded if EDCI 275 has been taken.

### 304 Human Learning and Cognitive Processes (4)

Prereq: 12 hrs psy including 101 and 121. Theoretical and experimental investigations of learning in human beings; concept learning, problem solving, memory, motor skills, and language.

### 305 Human Memory (4)

Prereq: 12 hrs psy including 101 and 226. Structure and processes of human memory, including historical models of memory, contemporary theories of memory, techniques used in memory experimentation, memory stores, memory codes, mnemonic devices, memory failures, neurological basis of memory and memory failures, and computer models of memory.

### 307 Psycholinguistics (4)

Prereq: 9 hrs psy including 101 or perm. How people produce, understand, and acquire language; psychological and linguistic theories. Emphasis on use of language.

### 308 Human Judgment and Decision Making (4)

Prereq: 12 hrs psy including 101 and 121. Descriptive and prescriptive models of human judgment and decision making. Topics include how people understand uncertainty, how they learn the relationships that enable them to make predictions, make decisions when the outcomes of these decisions are uncertain, and perceive risks. No credit awarded if MGT 430 has been taken.

### 310 Motivation (4)

Prereq: 12 hrs psy including 101. Survey of theories of motivation, with emphasis on human motivation.

### 314 Comparative Psychology (5)

Prereq: 9 hrs psy including 101. Behavior of animals across phylogenetic scale. Interaction of genetics, hormones, learning, etc., in development of behavior. Lecture, lab, field trips, and naturalistic movies.

### 315 Behavior Genetics and Individual Differences (5)

Prereq: 9 hrs psy including 101. Extensive survey of individual differences and their relationship to genetic factors. Topics include chromosomal abnormalities, inborn errors of metabolism, genetic and prenatal screening, behaviors in infants, genetics and intellectual differences, psychopathology and genetics, racial differences, and continuing evolution of behavior.

### 321 Experimental Design and Analysis (5)

Prereq: 101 and 121 or perm (226 recommended). Continuation of 121 statistical techniques through multifactor analysis of variance and post-tests. Integration of experimental design with statistical analysis. Does not apply to Arts and Sciences social science or natural science requirement.

### 327 Human Psychophysiology (4)

Prereq: 101 and 121 and perm (226 recommended). Relationships between psychological variables and physiological events in humans. Measures of cardiovascular, electrodermal, muscle, respiratory, and central nervous system activity; recording techniques;



research findings; and applications such as biofeedback and lie detection.

### 332 Abnormal Psychology (4)

Prereq: 9 hrs psy including 101. Behavior disorders, their cause, and effects on person, family, and society.

### 335 Environmental Psychology (5)

Prereq: 9 hrs psy including 101. Natural and built environments of everyday as factors of human behavior, cognition, and choice. Research concerning environmental design and evaluation from psychological standpoint emphasized.

### 336 Social Psychology (4)

Prereq: 101 and 121. Theory and research on the ways that people think about, influence, and relate to one another. Specific topics include attitudes and behavior, social perception and cognition, conformity, persuasion, group influence, aggression, attraction, and helping behavior.

### 337 Social Psychology of Justice (4)

Prereq: 9 hrs psy including 101 (336 recommended). Theory and research on the interface of psychology and the legal system (with an emphasis on social psychology). Specific topics include dilemmas faced by psychologists in the legal system; legality vs. morality; the socialization, training, and ethics of lawyers and police; perception, memory, and error in eyewitness testimony; hypnosis; lie detection and confessions; rights of victims and accused; rape and rapists; arrest and trial; jury selection; jury dynamics and deliberations; insanity and the prediction of dangerousness; sentencing; death penalty; rights of special groups; theories of crime.

### 351 Introduction to Clinical and Counseling Psychology (4)

Prereq: 12 hrs psy including 233 or 332. Diagnostic and remedial procedures and resources; professional problems, duties, skills, and interprofessional relationships.

### 361 Advanced Organizational Psychology (4)

Prereq: 261. Study of behavior in organizations with emphasis on applying psychological research and principles to understanding structure and process of (primarily work) organizations.

### 362 Personnel Psychology (4)

Prereq: 261. In-depth coverage of topics in personnel psychology including job analysis, organizational entry, and training and evaluation of personnel.

### 374 Psychology of Adulthood and Aging (4)

Prereq: 9 hrs psy including 101 or perm (273 recommended). Behavioral change and continuity over adult years through old age. Emphasis on interaction of psychological, sociocultural, and biological variables as they contribute to behaviors of aging individual from perspective of developmental framework.

### 376 Psychological Disorders of Childhood (4)

Prereq: 101 and 273 or HECF 160 or EDEL 200. Characteristics, etiology, and treatment of abnormal child behavior: developmental, anxiety, depressive, eating, hyperactivity, conduct, and psychophysiological disorders.

### 378 Psychology of Gender (4)

Prereq: 9 hrs psy including 101. Sex differences in physical characteristics, abilities, personality, and social behavior; development of sex roles; sex roles across the life span; relationships of sex, gender, and sex roles to interpersonal functioning, work and psychological disorders.

### 380 Psychology of Health and Illness (4)

Prereq: 12 hrs psy including 101. Theory and research on the psychological aspects of physical health and illness; interrelationships of behavior, emotion, stress, lifestyle, and illness; psychological factors in disorders such as hypertension, coronary artery disease, headache, asthma, and immune disorders; applications and effectiveness of psychological interventions.

### 390 Research in Psychology (1-5, max 15)

Prereq: 226, written perm. Supervised independent research on predefined problem.

### 418 History and Systems of Psychology (4)

Prereq: 20 hrs of psych. Comparative, historical review of major conceptual orientations in psychology within last century. Includes analysis of important philosophy of science issues bearing on psychology, such as nature of theory, observation, explanation, and some specialized topics especially pertinent to psychology.

### 430 Psychoactive Drugs: Therapeutic Agents and Drugs of Abuse (4)

Prereq: 212 or 332 or 376. Patterns of use and abuse of psychoactive agents, behavioral and physiological effects of drugs; etiological factors in drug abuse; treatment of drug abuse; use of drugs in the treatment of mental disorders; comparative effectiveness and integration of pharmacological and psychological interventions; research methods and problems in conducting research.

### 470 Prenatal Influences on Development (4)

Prereq: PSY 273 or EDEL 200 or HECF 160: 212 or 1 biology course. Prenatal and perinatal influences on development, including the effects of genetic errors, drugs, nutrition, diseases, maternal behaviors, prematurity, and birthing techniques.

### 489 Fieldwork in Psychology (1-5, max 5)

Prereq: written perm. Independent fieldwork as volunteer or employee in work directly related to psychology. Arrangements for course credit must be approved by psychology faculty member before fieldwork begins. Contact assistant chair for undergrad affairs or other faculty member to complete necessary forms. Graded credit/no credit.

### 490 Seminars in Psychology (3-5)

Prereq: dependent on seminar; perm required. Several seminars on specific topics in psychology offered yrly, carrying predetermined alphabetical designations (e.g., 490A). See *Schedule of Classes* for topics each qtr.

### 491 Special Problems in Psychology (1-15)

Prereq: written perm. Independent work on special problem with any psychology professor.

### 492 Special Problems — Psychology (1-15)

Prereq: Study Abroad Program, perm.

### 496H Psychology Honors Seminar (3-5)

Prereq: perm, admission to departmental honors program. Seminar on specific topics. See *Schedule of Classes* each qtr.

### 497H Readings in Honors Work (1-4, max 10)

Prereq: perm.

### 498H Honors Work in Psychology (1-4, max 10)

Prereq: perm. Preparation for 499H.

### 499H Honors Work in Psychology (Thesis) (3-7, max 15)

Prereq: perm.

## QUANTITATIVE BUSINESS ANALYSIS

In addition to the B.B.A. degree requirements, a student majoring in quantitative business analysis must complete CS 220 (FORTRAN) or its equivalent and at least 20 hours of 300-400 level courses including QBA 371 and 314 and at least 2 other QBA courses or their equivalent. One 300-400 level course can be from an approved list of courses in the functional areas. A list of these approved courses is available in the Department of Management Systems office. While not required, students who are considering majoring in QBA are encouraged to take MATH 163B (Integral Calculus) and MATH 211 (Elementary Linear Algebra) or their equivalent.

**NOTE:** Of the courses listed below, only QBA 201, 371, 445, 454, 455, 491, 493, and 497 are offered regularly. The quarters in which they are offered are indicated in parentheses in the course description. Students should check with the department to learn when courses marked with an asterisk will be taught.

### 201 Introduction to Business Statistics (4)

Prereq: MATH 163A, MATH 250B. Sampling plans, point and interval estimation. Classical (hypothesis testing) decision theory. Contingency table analysis, simple regression and correlation analysis, and non-parametric statistics. Computers are used to aid analysis when appropriate. (**NOTE:** QBA 201 is a continuation of MATH 250B and should be taken as soon as possible after MATH 250B.)



**314 Introduction to Management Science (4)**

Prereq: 201 and POM 310. (winter) Introductory survey of techniques of management sciences, viewed as part of applied decision theory. Applications in fields of accounting, production, finance, and marketing stressed. Course topics include inventory models, linear programming, network analysis, queuing models, simulation, dynamic programming, branch and bound methodology.

**371 Statistical Analysis of Data (4)**

Prereq: 201. (fall) Further topics in applied statistics. Design and analysis of survey samples. Analysis of variance. Modern decision analysis. Time series analysis (moving averages, smoothing procedures).

**430 Statistical Quality Control (4)\***

Prereq: 201. Application of sampling theory to quality control: in process control (i.e., control charts) and sampling inspection (i.e., attribute and variable).

**434 Design of Experiments (4)\***

Prereq: 201 or perm. Nested, split plot; replicated designs; multi-factor experiments; compounding; fractional factorials; analysis of covariance.

**438 Nonparametric Statistics (4)\***

Prereq: 201 or perm. Appropriate statistical tests; power; asymptotic efficiency; parametric vs. nonparametric; Fisher's randomization method; run test; multisample tests; 1-way ANOVA and 2-way ANOVA; miscellaneous tests.

**445 Forecasting Business Trends (4)**

Prereq: 201 or perm. (fall) Forecasting techniques and methodologies considered as tools decision makers use to provide basis for determining nature of future environments in which business will have to operate. Forecasting is means for integrating total corporate planning with technical marketing and financial planning.

**451 Statistical Survey Techniques (4)\***

Prereq: 201 or equiv. Techniques of analysis and applications of various types of survey samples used in marketing, accounting, economics, and other areas within business and government.

**454 Intermediate Probability Theory (4)**

Prereq: 201, 371, or equiv. (winter, odd years) Random variables—moment generating functions and expected multidimensional (continuous and discrete) values, limiting theorems.

**455 Intermediate Statistical Inference (4)**

Prereq: 454 or perm. (spring, odd years) Estimation, tests of hypothesis, sampling, analysis of variance, design of experiments.

**456 Regression Analysis (4)\***

Prereq: 371 or perm. Time series analysis, simple and multiple regression, and correlation analysis.

**462 Bayesian Decision Analysis (4.0)\***

Prereq: 201. Statistical inference and decision making taught from a Bayesian point of view. Comparison made with classical approach where instructive.

**485 Simulation (4)**

Prereq: 314 and CS 220 or perm. (spring, even years) Development of models of complex management decision environments and their manipulation via computer simulation. Analysis and interpretation of simulation results. Applications to problems in marketing, finance, and production.

**491 Seminar (4)**

Prereq: perm. Selected topics of current interest in quantitative business analysis area.

**497 Independent Research (1-4)**

Prereq: perm. Research in selected fields of quantitative business analysis under direction of faculty member.

**498 Internship (1-4)**

Prereq: perm.

## RADIO-TELEVISION (Electronic Media) Associate Degree Program

The following R-TV courses are available only at the Zanesville campus for the A.A.S. program in radio-television. In addition, the following courses offered on the Zanesville campus count toward the A.A.S. degree as well as the four-year telecommunications degree: TCOM 170, 200A, 206, 308; JOUR 351, 353.

**101 Radio-Television Orientation (2)**

(fall) Overview of R-TV field, facilities, student responsibilities, and career expectations.

**122 Radio-Television Performance (4)**

(spring) To provide overview of responsibilities required for radio and television announcing, and to provide practice and performance situations necessary to develop proficiency in performance skills.

**211 Audio Production-Direction (4)**

(winter) Principles of basic radio production and development of criteria for evaluation of radio production. 2 lec, 4 lab.

**214 Advanced Audio Production/Performance (2)**

Prereq: 211. (fall, spring; may be repeated 2 qtrs) Innovative techniques for production and performance of audio materials. Investigation and analysis of audio production development, and individual problems.

**216 Introduction to Video Production (4)**

(spring) Principles of basic television production and development of criteria for evaluation of television production. 2 lec, 4 lab.

**217 Advanced Video Production (2)**

Prereq: 216. (winter, spring; may be repeated 2 qtrs) Applications of studio and field production with emphasis on innovative techniques.

**257 Advertising in the Broadcast and Cable Media (4)**

Prereq: 106. (winter) Introduction to principles and practices of advertising and selling of time in electronic media situations. Format includes substantial instruction and interaction with individuals employed in station sales departments, and preparation of materials for sales strategies and campaigns.

**289 Broadcast Practicum (1)**

Prereq: R-TV major. (fall, winter, spring) Production or technically related assignments monitored and supervised within broadcast related services of OU-Zanesville. Requires minimum number of assigned hrs of tasks per wk during school terms. (May be repeated up to 6 qtrs.)

**290 Radio-Television Internship (1)**

Prereq: R-TV major. Approved assignments in area radio, TV, cable, or media production facilities. Requires contract of duties and time commitment between R-TV coordinator, student, and employee. Written evaluation required for course completion.

**298 Independent Study (1-4)**

Prereq: R-TV major, written proposal, and perm. Research projects requiring self-directed study and completion of paper or production relating to electronic media. (May be repeated up to 4 qtrs.)

## REAL ESTATE TECHNOLOGY

Real estate courses are available on the Athens campus through Lifelong Learning Programs and at the regional campuses through Continuing Education Offices. An Associate of Applied Business (A.A.B.) degree in business management technology with a real estate option is available at the Chillicothe campus.

**101 Real Estate Principles and Practices I (4)**

Real property is basic resource with which real estate professionals work. Course includes, but is not limited to, land and its description, rights and interests in real estate, contract law and real estate contracts, title transfer, deeds, leases, financing and mortgages,

taxes, home ownership, urban planning, brokerage operations, appraisal and value, applied real estate math, and Ohio requirements for real estate licenses.

#### **102 Real Estate Brokerage (4)**

Prereq: 101 or perm. Expands on 101 and includes specialized fields of real estate, principal-agent relationship, listing principles and practices, closing principles and practices, sales contract, principles of economics and real estate appraising, property insurance, real estate finance, federal laws regulating real estate practice, mathematics in real estate, and other facets of real estate needed by real estate professional; Ohio licensing laws and requirements.

#### **103 Real Estate Law (4)**

Prereq: 101. Includes all legal areas commonly concerned with typical real estate professional. Among topics covered are law of agency as applied to real estate brokers and salesmen, law of fixtures, estates, conveyancing of real estate, mortgages and liens, license laws of Ohio, and zoning.

#### **201 Real Estate Appraising I (4)**

Deals with appraisal theory, basic principles affecting value of real property; data accumulation and analysis of city, neighborhood, site, and property; applied techniques and estimating value from 3 approaches; building analysis, depreciation; entire range of appraisal process; and preparation based on field experience of preparing single-family residential appraisal report.

#### **204 Real Estate Finance (4)**

Prereq: 101. Includes institutions, methods, instruments, and procedures involved in financing of real estate; nature and characteristics of mortgage loans, government influence on real estate finance, and nature of mortgage market. Effects of monetary and fiscal policies on real estate financing considered.

#### **221 Real Estate — Special Topics (4)**

Prereq: 204. Special topics in real estate covered. Areas include professionalism, ethics, salesmanship, human relations, F.H.A. and V.A. financing, Real estate office, advertising, building construction and materials, current issues, and problems facing real estate professional also considered.

## **RESERVE OFFICERS TRAINING**

See Aerospace Studies or Military Science.

## **RUSSIAN**

See Foreign Languages and Literatures.

## **SECURITY/SAFETY TECHNOLOGY**

#### **101 Introduction to Protective Services (3)**

Introductory course designed to give overview of many facets of private security profession. Student will be able to relate private security's function to its proper perspective in today's complex society and to see where private security and its various functions fit into criminal justice system.

#### **110 Physical Security Systems (3)**

Physical security requirements and standards. Course includes study of various physical security systems plus technical devices employed in industrial, retail, and institutional security operations.

#### **120 Occupational Safety and Health (3)**

Analysis and implementation survey of federal laws pertaining to occupational safety and health standards and criteria.

#### **201 Fire Safety and Fire Codes (3)**

Function and objective of fire prevention programs, e.g., recognition and correction of fire hazards; enforcement of codes and ordinances; knowledge of federal, state, and local fire laws and codes. Further emphasis on fire prevention and fire protection.

#### **210 Loss Prevention in Modern Retailing (3)**

Detailed study of use of proper controls in loss prevention and loss detection in retailing industry. Emphasis to provide students with sound background for determining their needs in such areas as physical security, inventory security, security surveys, personal screening, risk analysis, and loss prevention as total systems approach.

#### **220 Analysis of Security Needs — Survey (3)**

Methodology used in making security, e.g., selection of scope, team composition, design of survey, compiling data, evaluation of planning, implementation, and results of corrective measures.

#### **230 Information and Data Systems Security (3)**

Introduction to theory and application of automated information data systems. Detailed study of security hazards involved in use of data systems. Laws pertaining to Right to Privacy Act included as part of course content.

#### **240 Security Administration (3)**

Introduction to corporate security administration including historical and legal framework for security operations as well as detailed presentations of specific security processes and programs utilized in providing security.

#### **250 Current Problems in Security (3)**

Analysis of special problem areas in security such as security education and training, community relations, labor problems, and disaster planning. Other specific areas analyzed for further research by individual students depending upon their interest. These later areas may include bank security, campus security, computer security, hospital security, and various other areas.

#### **260 Analytical Accounting (3)**

Specifically designed for security administration majors. Covers areas such as audit tracing, cash flow analysis, inventory system analysis, and other auditing principles used to protect assets and discover losses.

#### **290A-Z Special Area Studies (3-4)**

Courses designed to provide flexibility to satisfy needs of particular industry in our area or of individual student who would like to pursue further study in specialized area.

## **SOCIAL WORK**

The Department of Social Work offers a flexible interdisciplinary curriculum designed to prepare students for beginning professional social work practice. Students completing the program will receive the A.B. degree with a major in social work. The Department of Social Work is fully accredited by the Council on Social Work Education. Graduates are qualified for full membership in the National Association of Social Workers and are eligible for licensing as social workers in Ohio.

The major requirement consists of a minimum of 51 hours of courses taken within the department. These include: SW 101, 290, 383, 390, 393, 394, and the social work practice sequence, SW 490A, 490B, 490C. A student seeking to enroll in the practice sequence must: (A) be a social work major, and (B) meet the standards of the profession including those contained in the NASW Code of Ethics. The student should: (A) have a 2.5 or above accumulative GPA; (B) have completed the pre-practice professional foundation areas; and (C) have had either volunteer or paid experience in an area of social welfare.

Additionally, the major requirement consists of the following courses taken outside the department: ZOO 103, Human Biology; PSY 121, Elementary Statistics; PSY 273, Child and Adolescent Psychology; PSY 332, Abnormal Psychology; PSY 374, Psychology of Adulthood and Aging; and SOC 351, Elementary Research Techniques. In addition to these, 27 hours must be taken in the social sciences, including at least one course in each of the following: anthropology, economics, and political science. Social work elective courses may be used to substitute for up to a maximum of 4 hours of this social science requirement.

The department also offers the social service minor. The minor has been designed for students who will be pursuing a career in a social service organization. The requirement consists of a minimum of 29 hours, with at least 20 hours at the 300 level. The following courses are required: SW 101, 190, 290, 383, 390, 393, and 394. In addition, at least one of the elective course offerings is required.

**101 Introduction to Social Welfare and Social Work (3) (2S)**

Provides an overview of a range of social problems and society's response to them through the social service delivery system. The problems and services described include: child abuse and neglect, drug and alcohol abuse, poverty, aging, mental health and illness, corrections, and others. Within this context, various career options and professional roles will be described, including that of social work.

**190 Social Work as a Profession (2)**

Prereq: social work major or perm. This course, normally taken concurrently with 101 provides social work majors with a 30 hour field experience to observe operations of social service organization and roles and functions of social workers and other helping professionals. Weekly seminar.

**290 The American Social Welfare System (4)**

Prereq: 101. (fall, winter) Nature of social welfare as social institution, stressing scope of social welfare activity; historical development; value orientation; response to critical social problems, issues in social policy, and emergence of social work as profession.

**380 Child Abuse and Neglect (4)**

Prereq: jr or sr rank plus 18 hrs in social science. Examines processes of identification, reporting, referral, and case management of child abuse and neglect cases. Multidisciplinary approach to these processes described.

**381 Counseling Older Adults (4)**

Prereq: PSY 101 plus jr rank. Focuses on basic counseling, communication, and intervention skills needed by persons working with aged. Problems specific to later yrs discussed. Field work component provides opportunity for interaction with older adults.

**382 Understanding Alcohol Problems and Alcoholism (4)**

Prereq: jr or sr rank. Provides knowledge and understanding of developmental perspectives of alcoholism, consequences of excessive alcohol use and alcoholism, problems in special groups such as women, elderly, Black Americans, etc., and array of interventions used in various stages of illness and for family members along with discussion on rehabilitation of alcoholic person.

**383 Introduction to Social Work Practice Methods (4)**

Prereq: major, jr rank, or perm. Focuses on development of effective social work communication skills as they relate to social work relationship and professional practice.

**384 Social Welfare Law (4)**

Prereq: 101 or perm. Examines the need for cooperation between the worlds of business and social welfare within the context of the legal system as it addresses the needs of the poor, the elderly, minorities, and families. Focuses on development of interpersonal problem-solving skills and team building, considering both socio-economic and legal factors.

**385 Administration and Supervision in Human Services (4)**

Prereq: jr rank or perm. Focuses on the description, analysis, and application of principles of administration and supervision that are relevant to human service agencies. Examines knowledge and skill bases of effective administration and supervision and applies them to the beginning employee.

**390 Social Policy (4)**

Prereq: 290 or perm. Examination of social policy stressing policy development; relationships of policy, goals, and organizational structure; and decision-making patterns and role assignments within social welfare organizations and agencies.

**393 Dynamics of Human Behavior I (4)**

Prereq: ZOOL 103, PSY 273. (fall) 1st in 2-course sequence designed to present holistic approach to assessing social functioning with emphasis on human diversity and integration of knowledge of behavior fundamental to practice of social work.

**394 Dynamics of Human Behavior II (4)**

Prereq: 393, PSY 374. (winter) Expands on 393 and further examines development and functioning of individual within developmental, systems, and ecological framework.

**395 Aging in the Welfare State (4)**

Prereq: jr rank; plus 18 hrs in social sciences. Review of available knowledge on social life and problems of aged in America. Attention devoted to social welfare policies and services designed to meet needs of elderly.

**490A Social Work Practice (8)**

Prereq: majors only: 383, 390, 394, and perm. (fall) 1st of 3-qr sequence offering field placement, seminar, and twice-wkly class. This qtr focuses on context of social work practice, application of social work's ethical value system, communication, and development of analytical skills for engaging in problem-solving process. (Students provide own transportation.)

**490B Social Work Practice (10)**

Prereq: 490A, SOC 351 and perm. (winter) Continuation of field placement with increased time in placement and practice seminar from previous qtr and twice-wkly class. Focus on phases of problem-solving process beginning with contact phase through implementation phase. (Students provide own transportation.)

**490C Social Work Practice (10)**

Prereq: 490B and perm. (spring) Continuation of previous qtr's field placement and practice seminar with twice-wkly class. Final phases of problem-solving process, evaluation and termination, examined. Additional topical areas include: grantsmanship, teamwork, and effecting organizational change. (Students provide own transportation.)

**498 Independent Studies and Special Projects in Social Work (1-10)**

Prereq: 12 hrs in social work and perm. Student responsible for design and implementation of course of study or special project in area related to social work. Student interested in course must submit proposal for approval by dept chair at least 30 days prior to enrollment in course. Course may be repeated until 10 hrs of credit earned.

## SOCIOLOGY

The major requirement for the A.B. degree in sociology is a minimum of 45 quarter hours of courses in sociology, of which at least 16 hours must be at the 400 level, and including: introductory sociology (101), the course in methods (351), and one course in theory (403 or 404). In addition, a statistics course (PSY 121 or its approved equivalent) is required. (Courses in anthropology count toward the Arts and Sciences social science requirement.)

In addition to the major in sociology, the department offers a minor. The requirement for the minor is a minimum of 28 hours of coursework in sociology, of which at least 16 hours must be at the 300 or 400 level: SOC 101; the course in methods (351); and one course in theory (403 or 404).

The Department of Sociology also offers special programs of study in the area of criminology and prelaw. See the section entitled Special Curricula. In this catalog, under the College of Arts and Sciences for Information concerning the programs.

**101 Introduction to Sociology (5) (2S)**

Nature of human society and factors affecting its development. Fundamental concepts of sociology: culture, personality, socialization, social organization, groups, institutions.

**201 Contemporary Social Problems (4) (2S)**

Prereq: 101 or soph rank or above. Sociological perspectives on social problems considered. Specific social problems analyzed may include problems related to crime, sexual inequality, poverty, minority groups, drug and alcohol abuse, mental illness, environment, and others.

**210 Introduction to Social Psychology (4)**

Prereq: 101. Patterning of individual behavior from social interaction. Analysis of individual-group relationships in various social settings. Current theory and research in social psychology.

**211 Crowd and Mass Behavior (4)**

Prereq: 101. Study of collective behavior including the formation of crowds; behavior in crowds; behavior in panics, disasters, fads, and riots; and the impact of collective behavior on society.

**220 Introduction to the Family (4)**

Prereq: 101. Primary emphasis on American family and how it has been changing. Among specific topics explored are interaction within family, family in relation to other institutions, mate-selection, marriage and its alternatives, family disorganization, and future of American family.

**223 American Society (4) (2S)**

Prereq: 101 or soph rank or above. Sociological analysis of the institutional context of major contemporary social issues. Specific issues analyzed may include industrialization, urbanization, bureaucracy, militarism, structure of power, social-inequality, and others.

**230 Sociology of Poverty (4)**

Prereq: 101. Critical examination of theories of poverty, how poverty is defined and measured, theoretical implications of research on poor, consequences of poverty, and strategies to fight poverty.

**231 Sociology of Health and Health Care (4)**

Prereq: 101. Examination of social definitions of health and disease, distributions of health and disease, and health care delivery. Particular attention devoted to medical education, various health care delivery systems, and contemporary social issues in medicine.

**233 Sociology of Sport (4)**

Prereq: 101 or jr or sr rank. Analysis of social aspects of sport, with emphasis on interrelationship of sport and society. Focuses on topics such as social values, education, sport roles, religion, socialization, mass media, sexism, and racism; oriented to student with interest in sports.

**240 The Future Society (4)**

Prereq: 101 or soph rank or above. Outline of possible futures of society by projection from baseline data on: population growth and mobility; patterns of resource and energy consumption; quantitative and qualitative dimensions of modification of human habitat; evolution of technology; and nature of human culture and social structure as they relate to above. Students will have opportunity to speculate on society of future.

**280 Sociology of Popular Music (4)**

Prereq: 101. Popular music as meaning, performance, group activity, and industry, and expression of cultural forms, values, and concepts. Focuses on describing and analyzing these dynamics, with specific emphasis on messages, functions, and organizational behavior.

**305 Readings in Sociology (1-6, max 6)**

Prereq: 16 hrs and perm. Independent, directed readings designed to expand student's understanding in selected area of interest.

**309 Sociology of Appalachia (4)**

Prereq: 101 or perm. Intensive study of Appalachia from sociological perspective. Emphasis on population of Appalachia (number and distribution of inhabitants, characteristics of population, vital processes and migration), culture of rural poverty, acceptance of innovation and social change in Appalachia, major social institutions in area, and community power structure in Appalachia.

**315 The Individual in Mass Society (4)**

Prereq: 8 hrs. Examines the diversity and complexity of social relationships between the person and society in terms of identity formation. Focus will include levels of socialization and their influence on the individual as a member of mass society.

**329 Minority Group Relations (4)**

Prereq: 101. Racial and ethnic problems in America; causes and consequences of prejudice and discrimination.

**331 Class and Social Inequality (4)**

Prereq: 8 hrs. Causes and consequences of class and social inequality in selected societies. Critical examination of ideologies that claim to justify inequality.

**334 Sociology of Aging (4)**

Prereq: 8 hrs of sociology. General introduction to social gerontology with emphasis on normal aspects of aging. Major emphasis on sociological dimensions of aging in context of such areas as socio-demographics of aging populations, values, roles,

norms, self-concept, age stratification, aging patterns of minority groups, and application of current sociological theories of aging.

**340 Population Analysis (4)**

Prereq: 8 hrs. Study of the relations among fertility, morbidity, mortality, and migration in selected human populations, and ecological, natural resource, and cultural variables which sustain and limit those populations.

**351 Elementary Research Techniques (4)**

Prereq: 8 hrs. Research techniques in sociology. Research design; collection, recording, and analysis of data.

**352 Field Studies in Sociology (1-10)**

Prereq: 351 and perm. Planning, execution, and write-up of empirical study, utilizing skills developed in 351. Limited class meetings, conferences with instructor, research report.

**356J Writing in Sociology and Anthropology (4) (1J)**

Prereq: jr rank and perm or 13 hrs sociology and/or anthropology. Jr-level composition course for sociology and anthropology majors and students in related fields. Combines writing instruction with consideration of substantive social science topic. Students try various styles of social science writing (book reviews; grant proposals; field notes; interviews; etc.).

**361 Deviant Behavior (4)**

Prereq: 8 hrs. or perm. Theory and research concerning major types of deviant behavior and societal reaction to such things as criminality, suicide, drug addiction, and mental disorders. Causes and consequences of deviant behavior.

**362 Criminology (4)**

Prereq: 8 hrs. Theories and research in criminal behavior and societal reaction to criminality. Causes and consequences of crime.

**363 Juvenile Delinquency (4)**

Prereq: 8 hrs. Theories and research in delinquency. Causes and consequences of delinquent behavior among juveniles.

**365 Sociology of Mental Illness (4)**

Prereq: 8 hrs or perm. Study of social and cultural foundations of mental illness, including review of historic and contemporary definitions of madness and treatment of mental illness. Distribution of mental illness in population and social factors related thereto. Nature of commitment process and legal, moral, and social implications of commitment. Examination of legal processes pertaining to criminal insanity.

**366 Penology (4)**

Prereq: 101; 361 or 362 or 363. Examination of history, operation, and problems of punishment. Patterns of prison organization, inmate group structure, personnel organization, and racism examined. Purpose and effectiveness of penal institutions described. Prisons, juvenile institutions, parole, halfway houses, and alternatives to punishment studied.

**370 Sex Roles and Inequality (4)**

Prereq: 8 hrs of sociology or perm. Examination of social and historical factors that have kept women subordinate to men in family and prevented them from achieving equality in labor force. Also explores prospects for change.

**403 Development of Sociological Thought (4)**

Prereq: 8 hrs. Major sociological concerns and concepts in relation to their social-historical setting. Special emphasis upon sociological thought in 18th and 19th centuries.

**404 Modern Sociological Theory (4)**

Prereq: 12 hrs. Critical examination of major sociological conceptual frameworks in 20th century.

**406 Proseminar in Sociology (4)**

Prereq: 20 hrs. Critical examination of selected theoretical and research problems. Primarily for advanced students in sociology.

**408 Latin American Society (4)**

Prereq: 8 hrs or prev course on Latin America or perm. Intensive study of Latin American society from sociological perspective. Emphasis on contemporary Latin American values, population problems, human-land relations, levels and standard of living, social institutions, urbanization, and social change.

**412 Public Opinion Processes (4)**

Prereq: 210 or 211. Attitudes and opinions in relation to formation of public opinion; political socialization and participation; social status, reference groups, decision making; role of mass media.

**413 Mass Communication (4)**

Prereq: 210 or 211. Personal and social functions of content in newspapers, radio, television, and film. Types of audiences and communication effects. Organization and control of mass media and problems in evaluation.

**414 Contemporary Social Movements (4)**

Prereq: 8 hrs. Organized movements resulting in major social changes: revolutionary, nationalistic, reform, religious; agitation, leadership, ideology; case studies of typical movements.

**416 Society and the Individual (4)**

Prereq: 8 hrs sociology and psychology or perm. Exploration of compatibilities and/or contradictions in psychological systems, culture, and social structure.

**419 Small Groups (4)**

Prereq: 8 hrs. Major theories and methods for study of small group as unit of social systems; communication patterns, role definition, leadership, cohesion; review of current literature.

**424 Urban Sociology (4)**

Prereq: 8 hrs. Historical development and recent emergence of city as dominant feature of modern social life. Special emphasis upon demographic and ecological patterns and social organization of urban region.

**425 Sociology of Food Production (4)**

Prereq: 8 hrs. Interest is in the social organization of the production of food and fiber and its evolution. Also examined are historical developments and current trends in populations and settlement patterns in the U.S. and in Third World nations as they are influenced by a changing agricultural technology.

**428 Sociology of Religion (4)**

Prereq: 8 hrs. Interrelationship between religious institution and social structure from comparative perspective and with particular reference to American society.

**430 Sociology of Organization (4)**

Prereq: 8 hrs. Concentrates on structure and process of formal organizations. Modern society dominated by giant bureaucracies. We shall study these bureaucracies in detail. Various sociological perspectives for viewing organizations considered and evaluated. Impact of organizations on individuals discussed and problems of living in society dominated by organizations treated in depth (usually Portsmouth campus only).

**432 Political Sociology (4)**

Prereq: 8 hrs. Social and cultural basis of influence, power, and authority. Emphasis upon informal aspects of political process in groups and institutions other than government.

**433 Sociology of Occupations and Professions (4)**

Prereq: 8 hrs. Professionalism as characteristic of modern economic and industrial complexes; popular conception and modern theory; social and technological preconditions; occupation-profession continuum; components, barriers, and strategy; mock-professionalism; motivation and satisfaction; controls; professionalism in particular professions (usually Portsmouth campus only).

**435 Sociology of the Welfare State (4)**

Prereq: 8 hrs of sociology. Introduces students to major theoretical perspectives in the sociology of the welfare state, including industrialization, neo-Marxist, social-democratic, and "Independent-state" perspectives. Focuses on how proponents of these sociological research perspectives deal with the emergence, organization, growth, and contemporary issues of the U.S. social welfare systems. Also some attention to the social welfare systems of Sweden and other European countries.

**450 Data Analysis (4)**

Prereq: 351 or perm. This course develops the ability to analyze research data in the social sciences. The linkages among measurement, statistics, and interpretation of results in social research will be explored. Unscheduled computer laboratory commitment is required (not open to those with credit for CS 322).

**453 Research Problems in Sociology (2-6)**

Prereq: 20 hrs including 351 and written perm prior to registration. Individual research in specific problem areas in which student has demonstrated ability and interest.

**464 Social Control (4)**

Prereq: 12 hrs. Nature of institutional control and sociocultural constraint as they affect human behavior. Theories and research (usually Portsmouth campus only).

**465 Social Change (4)**

Prereq: 12 hrs or perm. Dynamics and processes by which social change takes place; major theories of change; industrialization and modernization; social evolution and revolution; planned change; social impact of change (usually Portsmouth campus only).

**467 Violence Against Women (4)**

Prereq: 16 hrs of sociology. Examines related forms of violence where women are the predominant victims: forcible rape, marital rape, incest, spousal assault, date rape and assault, and sexual harassment. Role of pornography will be examined. Emphasis placed upon current theoretical and empirical findings and developments.

**495 Internship in Criminology (5-10)**

Prereq: sr criminology major and perm. Provides Internship experience for students majoring in pre-criminology/sociology. Students will have opportunity to apply social science knowledge and methodologies and to gain direct job-related experience in criminal justice related agency.

## SOUTHEAST ASIAN STUDIES

See International Studies.

## SPANISH

See Foreign Languages and Literatures.

## SWAHILI

See Foreign Languages and Literatures.

## TELECOMMUNICATIONS

**121 Radio Performance (2)**

Responsibilities and skills required of radio performer; practice in performance techniques for radio. 4 lab.

**170 Media Perspectives (4)**

Studies role of electronic mass media in American popular culture through examination of uses, forms, themes, and implicit values. Combines lecture, discussion, and analysis of personal media uses.

**200A Telecommunications Writing and Production Planning (4)**

Prereq: soph rank. Introduction to nondramatic script writing in telecommunications. Examination of elements of preproduction preparation.

**200B Audio Production (4)**

Prereq: C or better in 200A. Introduction to basic audio theory and production skills, including console operation, editing, and mixing. 2 lec, 4 lab.

**200C Video Production I (4)**

Prereq: C or better in 200A. Basic elements of video program production and direction. Introduction to basic video production skills. 2 lec, 4 lab.

**206 Professional Options in Telecommunications (4)**

Prereq: 200A. A survey of telecommunications fields. Analysis of staffing and employment patterns in the electronic media with emphasis on program of study and career planning.

**308 Technical Bases of Telecommunications (4)**

Principles of electronic reproduction and transmission of aural and visual signals; functions of audio and video equipment.

**313 Field Audio Production (4)**

Prereq: 200B. Audio production techniques, including remote set-up, live mixing, interviewing, and feature production.



**317 TV Studio Operations (2)**

Prereq: 200C. Practical television studio experience as a member of production crew for newscast, magazine show, or Athens Video Works programs.

**318 Video Production II (4)**

Prereq: 317, jr rank. Basic video esthetics. Lab experience in production and direction of video projects.

**319 Video Production III (4)**

Prereq: 308, 318, video production sequence and perm. Production of videotape programs using single camera "film style" technique. Includes all phases of production process from conception to post-production.

**320 Staging and Lighting (4)**

Prereq: jr rank. Tools and techniques for effective television lighting and set design and use. Experience in use of lighting plots, scrims and flags, gels, meters, waveform monitors, and vectorscopes. Construction of simple set pieces.

**322 Television Performance (4)**

Prereq: TCOM 200C. Advanced exercises in television performance. Assignments include hosting, weather casting, interviewing, newscasting, and demonstrating.

**331 Telecommunications Writing (4)**

Prereq: jr rank. Writing for a variety of formats, including radio and television features, talk shows, documentaries, instructional programs, and dramatic and comedy series.

**355 Broadcast and Cable Programming (4)**

Prereq: jr rank. Broadcast and cable programming principles and practices; analysis and evaluation of programs and program formats.

**360 Telecommunications Management (4)**

Prereq: 355 or perm. Intensive overview of bases of telecommunications management; includes concepts relating to management theory, personnel motivation, organizational communication, and management's relationship to various aspects of organizational operation.

**367 World Broadcasting (4)**

Prereq: jr rank. Analysis of national telecommunications systems in terms of relevant political, social, economic, and cultural factors.

**370 Mass Communication Theories (4)**

Prereq: jr rank. Readings course surveying literature in mass communication theory. Special emphasis on telecommunications.

**371 Effects of Mass Communications (4)**

Prereq: 370. Readings course designed to acquaint students with major areas of experimental research in individual and social effects of mass media.

**384 Television Criticism (4)**

Prereq: jr rank. Survey of contemporary methods of critical analysis as applied to television. Screenings include television programs of past, present, avant-garde, mainstream.

**390 Practicum (1)**

Prereq: TCOM majors and premajors only. Practical experience in Ohio University telecommunications facilities. May be repeated for max of 6 credits.

**405 Research Internship (1-9)**

Prereq: acceptance by competition only. Opportunity for students to implement and complete major research study under supervision.

**413 Studio Audio Production I (4)**

Prereq: 200B, jr rank. Advanced studio production techniques for audio, with introduction to multitrack recording. Study of technical and aesthetic topics as they relate to media, music, and dramatic production.

**414 Studio Audio Production II (3)**

Prereq: 413 and perm. Operational aspects of recording studios including typical equipment set-ups, specialized, and ancillary equipment. Study of business considerations and studio management.

**415 Studio Audio Production III (4)**

Prereq: 414 and perm. Operational aspects of 16-track recording. Laboratory experience in music production, microphone techniques, audio processing, audio for video, SMPTE synchronization, and other production techniques.

**418 Producing for Video (4)**

Prereq: 318 and perm. Developing programs for commercial, public, and corporate television. Covers program research, development, and testing of program concepts, and the production process.

**419 Video Production III B (4)**

Prereq: 318. Special projects in dramatic production for visual media.

**421 Nonbroadcast Video Systems (4)**

Prereq: TCOM 200C, jr rank. Introduction to use of telecommunications media in corporate, industrial, medical, educational, military, governmental, and public service institutions.

**431 Dramatic and Documentary Writing (4)**

Prereq: jr rank. Writing and critique of form, structure, and presentation of both dramatic and nondramatic programs, series, and films.

**432 Advanced Dramatic and Documentary Writing (4)**

Prereq: 431 or perm. Advanced writing course in which the experienced student creates substantive scripts in documentary and dramatic areas.

**433 Script Analysis (4)**

Analysis of narrative media scripts, programs, and films with special concentration on their construction, audience response, and factors in effectiveness.

**440 Public Broadcasting (4)**

Prereq: sr rank. Historical development, current status, and challenges to public broadcasting.

**452 Electronic Newsgathering (4)**

Prereq: jr rank. A broad introduction to the use of electronic news gathering technology by the television journalist. Emphasis on planning, writing, and reporting as well as production and editing of videotaped news packages. Identical to JOUR 452.

**453 Telecommunications Law and Regulations (4)**

Prereq: jr rank. Socio-political control of telecommunications; effects of law and regulations upon telecommunications policy and operation.

**454 Personal Values in Telecommunications (4)**

Prereq: jr rank. Explores the nature of personal values and surveys the values that have shaped and are shaping American culture. Examines the role of the individual within media institutions and media within American culture. Encourages individuals to consider the problems and ramifications of living out personal values and commitments in the high pressure world of telecommunications.

**459 Audience Research (4)**

Prereq: jr rank. Various methods, techniques, and applications of audience study in broadcasting and cable; includes study of current rating services.

**461 Telecommunications Financial Management (4)**

Prereq: 360 or perm. Consideration of fiscal problems in operation of radio, television, and cable industries, with special emphases on economics and financial policies.

**462 Broadcast and Cable Sales Management (4)**

Prereq: 461 or perm. Consideration of policies and practices with reference to sales management in radio, television, and cable.

**463 New Technology (4)**

Prereq: sr rank. Examination of emerging technologies of telecommunications, their origins, audiences, regulations, interrelations with other media, and specific applications.

**464 Cable Communications (4)**

Prereq: jr rank. Critical examination of cable industry, including technical aspects; franchising; programming; local, state, and federal regulation; and public interest service.

**465 Satellite Communications (4)**

Role of satellites in global communications from historical, technical, regulatory, economic, political, and programmatic perspectives.

**475 Politics and the Electronic Media (4)**

Prereq: jr rank. Examines relationships between electronic media and political process through study of campaign strategy, polling, commercial advertising, and news coverage.



**476 Children's TV Programming (4)**

Application of child development theories to the analysis and development of children's television programming.

**479 History of Broadcasting (4)**

Prereq: jr rank. Origin of systems of radio and television communication and their development to present.

**481 Women in Media (4)**

Prereq: jr rank. Examines representation of women in media through experiential exploration of individual attitudes and values with respect to culture, sexism, and content analysis of media.

**482 Documentary Genres (4)**

Prereq: jr rank. Explores the various forms and styles of documentary video and film. Deals with such topics as historical development, factuality and truthfulness, objectivity, and ethics. Assignments and discussion are based on an extensive schedule of screenings.

**486 Colloquium in Telecommunications (1-5)**

Prereq: perm. Intensive study of special topics in field of telecommunications.

**490 Internship in Telecommunications (8-12)**

Prereq: sr rank and perm. Telecommunications experience under auspices of cooperating organization, with paper and journal submitted detailing intern's experiences. Only 4 hrs can be used to satisfy TCOM electives.

**497 Independent Production Projects (4)**

Prereq: perm and written proposal. Independent projects in audio and video production.

**498 Special Problems (1-4, max 12)**

Prereq: written proposal and perm.

**499 Independent Readings in Telecommunications (1-4, max 12)**

Prereq: written proposal and perm.

## THEATER

The following courses of instruction in theater provide the student with further clarification of the curricular requirements and models outlined in the School of Theater section of the College of Fine Arts chapter in Colleges and Curricula. It must be emphasized that all theater majors maintain close contact with their assigned advisors for guidance and clarification in programming. If an advisor has not been assigned, please contact the School of Theater office on the third floor of Kantner Hall. Further information concerning course listings may be received through the School of Theater office.

**090 Lunchbag Theater Seminar Series (0)**

Seminar and discussion about trends in theater scholarship, production, and performance techniques. May be repeated.

**101 Introduction and Orientation to the Theater as a Profession (1)**

(fall) Acquaints theater majors and other interested students with professional theater. Examines varieties of theater institutions (educational, commercial, regional, etc.), role of administrator, producer, and director and historical background for state of American theater.

**102 Introduction and Orientation to the Theater as a Profession (1)**

(winter) Continuation of 101 with particular emphasis on training and job opportunities for actors, scene designers, costume designers, and lighting designers.

**103 Introduction and Orientation to the Theater as a Profession (1)**

(spring) Continuation of 101 and 102 with particular emphasis on training and job opportunities for theater managers and arts administrators (stage managers, technical directors, house managers, business managers); training in other countries, history, purpose, and present function of theater unions; important theater journals and associations; and specialized training for related theater fields.

**105 Practicum in Management (1-4)**

Prereq: perm. Supervised lab practice in problems of theater publicity, finance, and house management. May be repeated.

**110 Introduction to Performance (4)**

Prereq: theater majors. Introductory study of acting and actor. Emphasizes preparation of self and text, exploration of space, development of physical and vocal freedom through improvisation and theater games.

**110Y Introduction to Performance (4)**

Prereq: nontheater majors. Introductory study of acting and actor. Emphasizes preparation of self and text, exploration of space, development of physical and vocal freedom through improvisation and theater games.

**111 Improvisation I (2)**

Prereq: 110 or 110Y & perm. (winter) Introduction to the uses of improvisation as a means for exploration of self and text; also explores improvisation as an entertainment tool.

**112 Introduction to Voice and Movement (2)**

Prereq: perm. (spring) Study and practice of the principles of voice and movement training for the actor.

**130 Introduction to Stagecraft (3)**

(fall) Principles of technical production. 2 lec, 1 lab.

**131 Introduction to Lighting (3)**

(spring) Principles of technical production. 2 lec, 1 lab.

**132 Introduction to Costume (3)**

(winter) Principles of technical production. 2 lec, 1 lab.

**135 Practicum in Production Design (1-4)**

Prereq: perm. Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound. May be repeated.

**150 Viewing Performance (2)**

Integrates classroom and student life activities at the University by combining the O.U. Artist Series and major productions of the schools of Comparative Arts, Music, Dance, and Theater with seminar course dealing with characteristics of the medium and artistic concerns. A two-hour seminar precedes and follows each of the four performances.

**170 The Theater Experience (4)**

(2H)

Exploration of nature and function of theater as art form through exploration of performer/space/audience interrelationship. Attendance at selected rehearsals and performances of Ohio University Theater productions augment lecture and discussion sessions. Attendance at selected professional theatrical performances may be included.

**171 Play Analysis (3)**

(2H)

Prereq: 170. (fall) Introduction to text analysis based on premise that understanding of play's text is important step toward understanding both performance of that play and means by which that performance is created. Attendance at Ohio University Theater productions is important augmentation to class lectures and group discussions.

**172 Elements of Performance (3)**

Prereq: theater major. (fall) Introduction to the elements of performance that create theater and drama, including text, performer, spectacle, spectator, and performance space. The emphasis is on the analysis of the text, how the text works as part of the performance, and how the text is brought to life in performance. Attendance at O.U. Theater productions is required.

**179 Theater Arts & Drama Workshop I (2)**

Prereq: 1st yr th. arts & drama majors; perm. A workshop designed specifically for majors in theater arts and drama that brings together the wide variety of theater interests of the theater arts and drama students. The topic in this first of the three year sequence is the relationship between theater space and performance.

**205 Practicum in Management (1-4)**

Prereq: perm. Supervised lab practice in problems of theater publicity, finance, and house management. May be repeated.

**210 Acting I (4)**

Prereq: majors and perm. (fall) Principles and techniques of acting with major emphasis on developing trust and freedom. Warm-up techniques, theater games, improvisation, monologue exercises, and preliminary scoring techniques underline this introduction to the work of actor.

**210Y Acting I (4)**

Prereq: 110Y; nonmajors. Study of acting and the actor from the point of view of strengthening concentration and commitment to performance tasks; introduces principles of text and character scoring.

**211 Acting II (4)**

Prereq: majors and perm. (winter, spring) Continuation of training started in 210, with addition of more detailed character development, scoring techniques, and ensemble considerations through duet scene work.

**211Y Acting II (4)**

Prereq: 210Y; nonmajors. Continuation of work begun in 210Y with special application to scene work.

**212 Acting III (4)**

Prereq: majors and perm. (spring) For the serious acting student, this course completes the second year of the sequential training program. Primary emphasis is to apply techniques learned in 210 and 211 to more lengthy and complicated scene structures. Long duet scenes and multi-character scenes or short plays used for study and performance. Grad directors and public performances are frequently incorporated into final work in this course.

**212Y Acting III (4)**

Prereq: 211Y; nonmajors. Application of principles and techniques learned in earlier classes to a full text leading to public performance.

**215 Practicum in Acting (1-4)**

Prereq: aud, soph rank. Supervised lab practice in rehearsal and public performance of roles. May be repeated.

**216A Body Training (2)**

Prereq: perm. (fall) Individual and group instruction in basic elements of body training for the stage.

**216B Body Training (2)**

Prereq: 216A. (winter) Continuation of 216A; see 216A for description; must be taken in sequence.

**216C Body Training (2)**

Prereq: 216B. (spring) Continuation of 216A-216B; see 216A for description; must be taken in sequence.

**217A Voice Training (2)**

Prereq: perm. (fall) Individual and group instruction in basic elements of vocal training for the stage.

**217B Voice Training (2)**

Prereq: 217A. (winter) Continuation of 217A; see 217A for description; must be taken in sequence.

**217C Voice Training (2)**

Prereq: 217B. (spring) Continuation of 217A-217B; see 217A for description; must be taken in sequence.

**218A Voice/Speech Training for Broadcasters:  
Lesaac Approach (2)**

(fall, winter) Group and individual instruction in basic elements of vocal training through Lesaac system.

**218B Voice/Speech Training for Broadcasters:  
Lesaac Approach (2)**

Prereq: 218A. (winter, spring) Continuation of 218A; see 218A for description; must be taken in sequence.

**218C Voice/Speech Training for Broadcasters:  
Lesaac Approach (2)**

Prereq: 218B. (spring) Continuation of 218A-218B; see 218A for description; must be taken in sequence.

**230 Stagecraft: Scenery (3)**

Prereq: 130. (fall) Procedures and practice in theatrical production; practical experience.

**231 Stagecraft: Lighting (3)**

Prereq: 131. (winter) Procedures and practice in theatrical production; practical experience.

**232 Stagecraft: Costume (3)**

Prereq: 132. (spring) Procedures and practices in theatrical production; practical experience.

**233 Theatrical Design Skills (3)**

Prereq: 130, 131, 132. (fall) Drafting, perspective, color, and rendering as applied to production design.

**235 Practicum in Production Design (1-4)**

Prereq: perm. Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound. May be repeated.

**237 Basic Makeup (1)**

Theory and practice of stage makeup. 1 lec, 1 lab.

**270 Theater History I (4)**

(2H)

(fall) Development of theater and drama in prehistoric, Greek, and Roman periods.

**271 Theater History II (4)**

(2H)

(winter) Development of theater and drama in medieval and Renaissance periods.

**272 Theater History III (4)**

(2H)

(spring) Development of theater and drama from Renaissance to modern.

**279 Theater Arts & Drama Workshop II (2)**

Prereq: 2nd yr th. arts & drama majors; perm. Continuation of process work begun in the first year of training. The topic in this second year is an in-depth, performance-oriented study of a specific script.

**297T Theater Tutorial (1-15)**

Prereq: perm. Subject matter of course arranged by tutorial student in consultation with School of Theater tutorial advisor.

**298T Theater Tutorial (1-15)**

See description for 297T.

**299T Theater Tutorial (1-15)**

See description for 297T.

**305 Practicum in Management (1-4)**

Prereq: perm. Supervised lab practice in problems of theater publicity, finance, and house management. May be repeated.

**310 Audition Technique and Practice (3)**

Prereq: 3rd year acting major; perm. (fall) Preparation of audition materials, experience in various audition spaces, development of techniques for cold reading, solo and duet, and the development of positive attitudes toward the audition experience.

**311 Improvisation II (3)**

Prereq: 212 or perm. (winter) Exploration of non-scripted performance modes and development of acting skills through theater games.

**312 Scene Study I (2-4)**

Prereq: 3rd year acting major and perm.. (spring) Extension of rehearsal/performance experience in 310 and 311. Advanced undergrad rehearses and performs in scenes directed by 2nd-yr grad directors and selected to enhance dramatic range.

**315 Practicum in Acting (1-4)**

Prereq: aud, jr rank 215. Supervised lab practice in rehearsal and public performance of roles. May be repeated.

**316A Stage Movement (3)**

Prereq: 216C; theater major. (fall) Principles and techniques of expressive movement.

**316B Stage Movement II (3)**

Prereq: 316A, theater majors only. (winter) Principles and techniques of expressive movement.

**316C Stage Movement III (3)**

Prereq: 316B, theater majors only. (spring) Principles and techniques of expressive movement.

**317A Voice for the Stage I (3)**

Prereq: 217C. (fall) Principles and practice in vocal action for stage.

**317B Voice for the Stage II (3)**

Prereq: 317A. (winter) Principles and practice in vocal action for stage.

**317C Voice for the Stage III (3)**

Prereq: 317B. (spring) Principles and practice in vocal action for stage.

**320 Directing I (4)**

Prereq: 211. Principles and practices of directing for stage.

**331 Theory of Lighting (4)**

Prereq: 231 and perm. (fall) Creative processes in design and execution of lighting for proscenium and non-proscenium forms.

**332 Costume Design I (4)**

Prereq: 232, 338, or perm. (fall) Application of principles of design to stage costuming, with emphasis on fabrics, figure drawing, and characterization.

**333 Fundamentals of Scene Painting (1-4)**

Prereq: none. Basic materials, techniques, and theory of painting for the stage.

**334 Scene Design (4)**

Prereq: 233 (winter) Principles and projects in scene design as part of production design.

**335 Practicum in Production Design (1-4)**

Prereq: perm. Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound. May be repeated.

**336 Props and Crafts Techniques (4)**

Prereq: perm. An introduction to theatrical crafts casting and soft sculptural construction techniques and materials as well as painting and decorative techniques.

**337 Advanced Makeup (3)**

Prereq: 237. (fall, odd years) Corrective, 3 dimensional, and non realistic makeup; rubber prosthesis; character analysis. 1 lec, 2 lab.

**338 History of Costume (4)**

Prereq: 232 or perm. (fall) Development of dress and influence of cultural factors from Egyptian and Asian civilizations including fabrics, accessories, and ornamentation.

**345 Ohio Valley Summer Theater Practicum (1-6)**

Prereq: perm. Supervised practice and experimentation in the company operation of a community theater performance project. May be repeated for credit.

**350 Playwriting (3)**

Prereq: perm. Theory and practice of dramatic writing.

**379 Theater Arts & Drama Workshop (2)**

Prereq: 3rd yr th. arts & drama majors, perm. Continued exploration in areas of specific interest to the theater arts & drama major, with development of individualized courses of study and preparation of the fourth year of study. The topic of study is the relationship of theater to the other arts.

**397T Theater Tutorial (1-15)**

(fall) Junior level tutorial class for students in the Honors Tutorial College.

**398T Theater Tutorial (1-15)**

(winter) See description for 397T.

**399T Theater Tutorial (1-15)**

(spring) See description for 397T.

**402 Theater Management (4)**

(fall) Procedures and practices in management of theater, including theater publicity, marketing, finance, ticket office, and house management.

**405 Practicum in Management (1-4)**

Prereq: perm. Supervised lab practice in problems of theater publicity, finance, and house management.

**409 Independent Studies in Administration (1-6)**

Prereq: perm and independent study form. Allows advanced theater major to develop study project in aspects and problems of theater administration beyond normal course offerings.

**410 Scene Study II (2-4)**

Prereq: 4th year acting major; perm. (fall) A performance course designed to provide advanced actor training majors with an opportunity to do detailed work on character and rehearsal processes.

**411 Acting IV (3)**

Prereq: 4th year acting major, perm. (winter) Exploration of specific problems in acting through use of exercises, monologues, and scenes.

**412 Television Performance (3)**

Prereq: perm. Performance experience in television acting with special emphasis on studio policies and operations, relationship of talent to the whole process of television production, analysis of camera performance techniques, and the production of scene work. This course is offered in conjunction with TCOM 419.

**413 Acting Internship (1-12)**

Prereq: perm.

**415 Practicum in Acting (1-4)**

Prereq: aud, sr rank. May be repeated. Supervised lab practice in rehearsal and public performance of roles.

**416 Advanced Stage Movement (2)**

Prereq: 316C and perm. (winter) Connection and application of stage movement to role or roles in period plays; involves seeking out of tempos and rhythms of character and examining how they differ in various periods.

**417 Advanced Voice Training: Dialects and Scansion (2)**

Prereq: 317A, B, C. (spring) Introduction to and experience in scanning essentials of versification as it particularly applies to reading of dramatic lines. Introduction to study of dialects through use of study tapes and other source materials.

**419 Independent Studies in Acting (1-6)**

Prereq: perm and independent study form. Advanced theater major can develop study project in aspects and problems of acting beyond normal course offerings.

**420 Directing II (4)**

Prereq: 320 and perm. Practical experience in directing for stage.

**425 Practicum-Directing (1-4)**

Prereq: perm. maximum 12 hrs.

**426 Stage Management (3)**

Prereq: perm. (fall) Theoretical course in techniques and methods of professional stage management.

**427 Practicum in Stage Management (2-4)**

Prereq: 426 and perm. Supervised practical experience in stage managing of university theater or related production.

**429 Independent Studies in Directing (1-6)**

Prereq: perm and independent study form. Advanced theater major can develop study project in aspects and problems of directing beyond normal course offerings.

**430 Advanced Stagecraft (4)**

Prereq: 230, 231, 232. (fall) Advanced problems of scenery construction, handling, and rigging.

**431 Lighting Design II (4)**

Prereq: 131, 231, 331. Provides the student opportunities for preparation and critique of lighting design projects in a variety of theatrical contexts.

**432 Costume Design II (4)**

Prereq: 332 (winter) Application of principles of design to stage costuming, with emphasis on fabrics, figure drawing, and characterization.

**434 Scene Design II (4)**

Prereq: 334. (fall) Provides student with a series of design projects with an emphasis on portfolio preparation.

**435 Practicum in Production Design (1-4)**

Prereq: perm. Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound.

**436A Model Construction for the Scene Designer (4, max 8)**

Prereq: perm. Introduction to the materials and techniques of model construction for the stage, including 1/4" and 1/2" scale models — experimental, working, and presentation models.

**436B Drafting for the Stage (4, max 8)**

Prereq: perm. Fundamental and advanced problems of drafting for the stage, including plans, sections, front elevations, rear elevations, and details.

**437A Sound Design I (4)**

Prereq: perm. Principles and functions of sound design for the theater.

**437B Sound Production (4)**

Prereq: perm. Principles, characteristics, and techniques in the use of sound equipment for the theater.

**438A Historical Bases of Design I (4)**

Prereq: major or perm. Survey of research techniques in history, the arts, and period "style" from Antiquity to Early Renaissance in Western Civilizations for the purpose of theatrical production.

**438B Historical Bases of Design II (4)**

Prereq: major or perm. Continuation of 438A, covering the period from the High Renaissance to the present.

**439 Independent Studies in Production Design (1-6)**

Prereq: perm and independent study form. Advanced theater major develops study project in aspects and problems of production design beyond normal course offerings.

**450 Advanced Playwriting (3)**

Prereq: 350 or perm. Special problems in writing long play.

**451 Playwrights Workshop (3, max 9)**

Prereq: perm. (winter, spring) Practical workshop experience for playwrights, directors, and actors with new scripts. May be repeated.

**459 Independent Studies in Playwriting (1-6)**

Prereq: perm and independent study form. Advanced theater major develops study project in aspects and problems of playwriting beyond normal course offerings.

**463A Theater and Architecture (4) (III)**

Prereq: Tier II completion, sr rank. Examines the historical and contemporary interaction of two art forms, theater and architecture, in the design and construction of theaters. Considers the requirements and demands of theater and architecture and analyzes their synthesis in creating actual theater structures.

**465 Practicum in Directing (1-4)**

Prereq: perm. Supervised lab practice in planning and executing dramatic production.

**470 Tragedy (4)**

Prereq: jr or sr. Study of tragic genre through both plays and critical and theoretical documents.

**471 Comedy (4)**

Prereq: jr or sr. Study of comic genre through both plays and critical and theoretical documents.

**472 Forms of Drama (4)**

Prereq: jr or sr. Study of genres of melodrama, farce, and tragicomedies through examination of plays and critical and theoretical documents.

**477 American Theater and Drama (4)**

Prereq: jr or sr. Study of significant movements and major playwrights of the American theater, with an emphasis on the 20th century.

**479 Independent Studies in Theater History and Criticism (1-6)**

Prereq: perm and independent study form. Advanced theater major develops study project in aspects and problems of theater history and criticism beyond normal course offerings.

**497T Theater Tutorial (1-15)**

(fall) Senior level tutorial class in theater subjects for students in the Honors Tutorial College.

**498T Theater Tutorial (1-15)**

(winter) See description for 497T.

**499T Honors Tutorial (1-15)**

(spring) See description for 497T.

## TIER III

Tier III, the final element of the General Education Requirement, is a senior-level requirement for students who entered the University in September 1982 or thereafter (transfer students should consult their college office to learn whether they have a Tier III requirement).

Two key ideas spurred the thinking that went into the creation of Tier III. One was structural, the other theoretical. The framers of the General Education Requirement believed that a solid and meaningful program of liberal studies should not be confined to basic courses taken largely during the freshman year, but should extend throughout an undergraduate's experience, enriching work in the upper division. The junior-level composition requirement, as well as Tier III, is a reflection of this conviction. Secondly, while there was wide agreement that work in the major was excellent for developing in students the powers of analysis — the ability to break things into smaller and smaller parts for detailed inspection and understanding — we realized that our curriculum offered few opportunities for students to develop a capacity for synthesis.

That capacity was defined as the ability to weave many complex strands into a fabric of definable issues, patterns, and topics. We wanted to nurture in our students the ability to understand that

problems and issues are often only successfully approached from a variety of perspectives. To contribute to the preparation of men and women capable of handling complex intellectual and social issues we needed to bring them together in courses specifically designed to confront broad topics from multiple perspectives.

**401A Images of Blacks in the American Mind (4)**

Prereq: sr rank or perm. Examines the nature, the sources, and the effects of ideas and attitudes about Americans of African descent that have pervaded American culture. Focuses upon images of blacks as bucks, coons, buffoons, improvident children, mammies, devoted Christians, etc. with a view of showing how widespread and deeply embedded these images have been in American culture and how they contributed to slavery and the subsequent exclusion of blacks from the mainstream of American life. Interdisciplinary in its nature, the course utilizes the approaches and materials of a variety of fields of study—literature, art, film, history, the natural sciences, social sciences, popular culture.

**401B American Experience Through Novels and Films (4)**

Prereq: sr rank. Offers interdisciplinary perspective on aspects of American cultural experience and awareness of nation's fictional and cinematic contributions. Works of fiction (with occasional plays) and their film adaptations are studied for purpose of exploring issues, such as frontier, American dream, black-white relations, individualism versus collectivism, heroism, and feminism, pertinent to understanding of American experience.

**401C Race and Ethnicity (4)**

Prereq: sr rank, 8 hrs social science. Review of various theories of race. Critique of diverse definitions of ethnic groups. Due attention given to problem of ethnicity in international arena. Cross-national comparisons made of ethnic processes in developing countries, vis-à-vis ethnic processes in U.S., Western and Eastern Europe.

**402A The Human Life Cycle (4)**

Prereq: sr rank, perm. Four stages of human life cycle — creation, transformation, sexuality, death—will be examined. Some biological characteristics of each stage will be studied. Social and cultural response to the life stages through essays, art, and poetry will be examined.

**402B Introduction to Alternative Agriculture (4)**

Prereq: sr rank and one course in botany. Approaches agriculture through three disciplines: history, health, and botany, particularly as latter relates to growth of plants in soil. Historical dev. of current agricultural problems is examined, and practical, biological-based solutions are proposed. The relationship between soil infertility and the health and disease of animals and humans is also examined. Problems relating to Third World cultures are emphasized.

**403A The Limits to World Growth: Can Science Provide Solutions? (4)**

Prereq: one yr. physical sciences or perm. sr rank. An examination of the problems concerning the future growth of the world and the finite limits which may be imposed by depletion of nonrenewable resources. Areas of discussion include energy, population, water resources, the food chain, pollution, and mineral resources. The approach taken will focus on the effects of today's science and technology in solving or creating future problems, and on the possibilities for future technology. The course is intended to broaden the outlook of both science and nonscience majors.

**406A Peace Corps Volunteers and Third-World Development (4)**

Prereq: sr rank or perm; Tier II. This course focuses on traditional societies throughout the world and on the interaction between people in those societies and "outsiders" from richer communities. Included are presentations by returned U.S. Peace Corps volunteers. Traditional societies, the impact on those societies of rapid social and economic change, challenges of intercultural communication, problems of project administration, and the ecological and environmental results of interaction.

**407A Darwin Among the Poets: England in 1859 (4)**

Prereq: sr rank and one course in English, political science, biology, or history. 1859 saw publication in England of unusually large number of major works in various fields. This course examines climate of ideas that produced these works, works themselves, and ideas and issues that resulted from them. Deals with Victorian (and modern) issues that touch on literature, science, politics, history, sociology, and religion.

**407B The Autobiographical Quest (4)**

Prereq: sr rank and one 200 level English course or perm (not open to students who have had 414A). Study of selected autobiographies with particular emphasis on individual's quest for meaning or value in course of life. Works examined and compared from various perspectives — literary, philosophical, religious, psychological, social — as appropriate.

**407C The Existential Vision: Philosophy, Literature, and Film (4)**

Prereq: sr rank and one course in philosophy, literature, or film. Seeks to synthesize contemporary philosophy, literature, and film by studying themes introduced by existential philosophers but treated also by post WW II writers and filmmakers.

**407E American Indian Cultures Through Literature (4)**

Prereq: sr rank. Offers students opportunity to explore U.S. history from perspective of Native American scholars as well as traditional historians, anthropologists, and literary scholars.

**407F Myth Today (4)**

Prereq: sr rank. First 6 weeks devoted to readings and discussions of modern theories of myth, ending with Roland Barthes' famous *Mythologies* (1957). In second phase, students draw together their notes and comments on theory of myth, according to their interests or special subject areas.

**407H Shakespeare and Psychology (4)**

Prereq: sr rank, ENG 301 or 303 or PSY 333. Examines Shakespeare's delineation of character psychodynamics and, at same time, examines how psychological interpretation makes plain or illuminates Shakespeare's characters. Course is part of larger attempt to explore ways in which literary and psychological interpretation complement each other.

**407L The Literacy Crisis: Origins and Effects (4)**

Prereq: sr rank, perm. Are the literacy skills acquired by students in schools in the United States adequate to the demands made by industry and society? Are the legislative and educational reforms designed to raise those levels likely to succeed or fail? This course will attempt to answer these questions. OU-Belmont only.

**408A American Conservation Movement (4)**

Prereq: sr rank, 4 hrs natural science. Topical survey of schools of thought, themes, and specific issues in American conservation in past century. 19th-century transcendental thinkers are baseline for survey. Contemporary environmental issues and debates provide capstone for course.

**408B Landscape and Culture (4)**

Prereq: sr rank. Consideration of Anglo-American landscape as key to understanding Anglo-American culture and its myths (e.g. frontier) and stereotypes (e.g. individualism).

**410A Philosophies of History (5)**

Prereq: sr rank; one upper level course in history or philosophy. Study and discussion of different philosophies of history dating from ancient to modern period. Analysis of how thinkers have taken empirical data of history and shaped them into metaphysical form.

**410B The Age of Michelangelo (4)**

Prereq: sr rank, 2 courses in one of following areas: European history, philosophy, art history, English literature. Michelangelo's life (1475-1564) spans two most significant movements in early modern European history, Renaissance and Reformation. All of his work, artistic and literary, reflect these movements. By studying his life and work one is able to acquire richer and more lasting insight into and appreciation of Renaissance and Reformation. Deals with philosophy, theology, architecture, art history, literature, and history.

**410C The Folklore of Espionage: The Spy in Novel, Film, and History (4)**

Prereq: Two Tier II courses in social science or humanities, sr rank. Presents the historical treatment of intelligence operations and espionage which have been depicted in literature and on film during the 20th century. Major themes include "The Spy as Hero"; "The Spy as Anti-Hero"; "Moles"; "Double Agents in Espionage"; "The Ambiguities of Cold War Espionage"; "Assassination"; "Espionage as Comedy"; and "Games Intelligence Services Play." Five novels and nine films which deal with these and other themes are examined.

**410E Slavery 1400 to Present (4)**

Prereq: sr rank, Tier II social science course. History of slavery and slave trade from 1400 to present. Different forms of slavery

compared, showing widely divergent roles of slaves, from high officials to field hands. Changes in systems through time and reasons for abolition of slavery examined. Modern forms of bondage (peonage, force labor, child labor, prostitution, illegal immigrant labor) and activities of United Nations Working Group on Slavery discussed.

**411A Linguistics and Semiotics: The Interpretation of Cultures as Texts (4)**

Prereq: sr rank, 270 or perm. Descriptive and functional linguistic approaches are applied to analysis of cultural phenomena and interpretation of their meanings for present and past societies.

**411B Literacy Across Cultures (4)**

Prereq: sr rank and LING 270 or 350, or ENG 307, or perm. Examines the consequences of literacy from social, cultural, and cognitive perspectives. Major topics are (a) oral vs. written communication, (b) the evolution of writing, (c) different writing systems; linguistic properties and information processing, and (d) literacy in its social context.

**411C Language and Mind (4)**

Prereq: sr rank or perm: 1 300 level: LING, PHIL, PSY, or ANTH. Evidence drawn from Noam Chomsky's theory of language will be brought to bear on the question of the place of the mind/brain in the natural world. Chomsky's claims touch on issues of central importance for linguistics, psychology, philosophy, and anthropology, and have had a decided impact on all of these fields over the past thirty years.

**413A Major French Cultural Contributions (4)**

Prereq: sr rank. Four major French contributions to Western culture studied: Gothic architecture, classical literature, Rousseau's *Confessions*, and Impressionist painting. Although each individual or movement studied in historical context, primary emphasis placed on nature of cultural innovations themselves — structural, technical, and aesthetic in Gothic architecture; psychological, literary, and philosophical in Moliere, Racine, Pascal, and Rousseau; pictorial in Impressionism.

**413B Science, Culture, and Human Values (4)**

Prereq: sr rank and completion of Tier II in humanities and natural sciences. Examination of nature of art and scientific inquiry by means of various 20th-century attempts at integration.

**413C Johann Wolfgang von Goethe: Scientist and Man of Letters (4)**

Prereq: sr rank or perm. Examination of interrelationship between principles adduced in Goethe's studies of natural phenomena and parallel forms and concepts in his works of literary art.

**413D Irony in Literature and Society (4)**

Prereq: sr rank or perm, one Tier II course in literature, social science, history of theater, or film. Exploration of ironic elements in literature, media, and society, with special attention to differences between ironic structures created through language and those found in visual arts and in music.

**413E Realism, Naturalism, and Impressionism in French Literature and Painting (4)**

Prereq: sr rank. Analysis and comparison of major 19th-century French realistic, naturalistic, and impressionistic novels and paintings with view toward deciding degree to which one may draw valid parallels between different art forms.

**414A The Autobiographical Quest (4)**

Prereq: sr rank, 4 hrs in philosophy, or perm; not open to those who have had 407B. Study of selected autobiographies with particular emphasis on individual's quest for meaning or value in course of life. Works examined and compared from various perspectives — literary, philosophical, religious, psychological, social — as appropriate.

**414B Liability and Responsibility in the Law (5)**

Prereq: sr rank; and PHIL 240, 330, 430, 440, or 441, or 2 courses above 200 level in hist, poli sci, soc, or psy. Study of some of major problematic areas in ascription of legal liability and responsibility. Chief areas of concern are: (1) grounds on which courts determine who or what is causally responsible for what occurred; (2) extent to which finding of legal responsibility should take account of intentions, knowledge, recklessness, etc. of accused; and (3) whether only sane individuals should be held legally responsible.

**414C Semiotics in Communication (5)**

Prereq: sr rank. Semiotics is concerned with systems of signs, their interrelationships, and the images used to transmit such systems.

This course introduces students to structures and processes of communication through the use of semiotics.

#### 414D History and Philosophy of Genetics (5)

Prereq: sr rank or perm; BOT 101, 110, ZOOL 100, 103 or 150. Genetics has played an important role in the development of medicine. Genetics has also been used in attempts to better society. To get a perspective on the ethical, social, and scientific issues raised by the development of genetics, we will discuss topics such as *in vitro* fertilization; surrogate motherhood; recombinant DNA; genetic counseling; the history of eugenics; and the attempt to formulate a logic for the scientific method.

#### 414E Philosophy, Science, and World Views (5)

Prereq: sr rank, 1 course in physics or zoology above 200 and 1 course in philosophy. Transformation of ideas from one discipline to another, especially transformation of ideas from philosophy to science and from science to generalized world-view. Special emphasis on two case studies on moral and social views derived from Newtonian mechanism and Darwin's theory of evolution, with applications to recent religious and metaphysical implications drawn from new physics of Einstein and Heisenberg.

#### 415A Entropy and Human Activity (4)

Prereq: sr rank. Energy is conserved, but most physical processes involve transformation of available energy into forms not as readily available. Jeremy Rifkin claims that civilized humanity should reorder its priorities so that increases of entropy, which characterize such transformations, should be minimized. Students discuss whether broad generalization of such a principle makes sense.

#### 416B Politics and Literature in the Soviet Union (5)

Prereq: sr rank. Uses Soviet literature (novels, short stories, plays, and poetry in translation) as means to gain fuller understanding of Soviet politics, history, and society; and to gain greater appreciation of impact of political ideology and political controls on development of literature in general and particularly in Soviet context.

#### 416D Human Values in a Technocratic Age (4)

Prereq: sr rank. Examines relationship between scientific inquiry, technology, and values. What impact has ascendance of scientific ethos had on values? What is the relationship between scientific inquiry and technology? Should scientific inquiry and technological development be subject to ethical constraints? Traces historical impact of science and technology on Western culture.

#### 417A Cognitive Processes in Writing (4)

Prereq: sr rank. Multidisciplinary examination of mental processes involved in creating written communication. Students examine writers and their works from standpoints of cognitive psychology and communication theory. Opportunities are given both to observe and to conduct experiments in writing process by interview, protocol, and pausal methods, as well as other techniques.

#### 419A Third World Development (4)

Prereq: 20 hrs in social science and sr rank. Focuses on various, often contrasting, approaches to national development. Discusses ways in which basic needs such as agriculture/rural development, education, housing, health, and urbanization are met, and discusses these approaches within context of ethical values. Countries discussed may include China, Brazil, Cuba, Nicaragua, Tanzania, South Korea, Taiwan, and Bangladesh.

#### 419B America in Decline? (4)

Prereq: sr rank; completion of Tier II; 20 hrs of social sciences. Critically reviews dominant post-WW II American ideology of economic, political, and cultural growth and recent emergence of new set of images of America in decline. Students also asked to consider future effects American decline might have on: (1) social structure, politics, and culture, (2) occupations and professions, and (3) their own personal lives.

#### 419C New Age Thought (4)

Prereq: sr. rank, completion of Tier I and Tier II with two natural, applied, or social sciences represented in Tier II. An examination of the foundations for conventional rational and scientific understanding of the world; followed by a survey of knowledge accumulating in the 20th century which serves as basis for alternative foundations.

#### 419D Emotion, Power, and Gender (4)

Prereq: sr rank or perm; ANTH 101, SOC 101, or PSY 101. This course examines the role played by emotion in our private as well as our public lives. A review of various theories regarding the nature

of emotion will be presented, followed by discussions of the nature, acquisition, and maintenance of power as well as the uses of power and the relationships between power and emotion. The last section of this course is concerned with the relationship between gender and power, gender and emotion, and how these two broad areas dovetail, providing an explanation of the role of emotion in our everyday public and private lives.

#### 419E Nature of War (4)

Prereq: SOC 101 or perm. and sr rank. Using a broad social science perspective, the course will examine the causes, consequences, and nature of war and various proposals to prevent war. Contributions of social scientists, philosophers, writers, and professional soldiers to an understanding of the social phenomena of war and peace will be reviewed and assessed.

#### 420A Microbes and Human Destiny (4)

Prereq: sr rank, 1 biology course. Examines examples of power and influence of invisible microbes in human history and present-day problems. Microbes have determined victors in individual battles, have contributed to outcomes of world wars, have affected demography, witch hunts, mores, fashion, arts, economy, and food production.

#### 420B Evolution and the Challenge of Creationism (4)

Prereq: sr rank. Examination of two ways of knowing — science and religion — as exemplified in controversy on evolution and creationism. Claims and evidence for evolution and special creation, issues and strategies of conflict, arenas of confrontation, and implications of outcomes for both science and theology are discussed.

#### 420C Biology of Human Social Behavior (5)

Prereq: sr rank or perm; Intro, ZOOL; ANTH, SOC, or PSY 101. Evolutionary perspectives on human social behavior are examined in light of data from the social sciences. Behaviors such as bonding and communication are seen to arise from both biological bases and social experience.

#### 432A Seminar in Negotiation and Conflict Resolution (4)

Prereq: sr rank. Examines nature of conflict from systems point of view. Presents theories and techniques of negotiations as method of resolving or managing conflict. Examples of successful and unsuccessful negotiations studied. Examples drawn from many areas of conflict, including purchasing and selling, marriage dissolution, labor contracts, hostage negotiations, plea bargaining, and international peace and arms limitation talks. Differences and similarities at various levels of negotiation are noted. Concludes with mock negotiation.

#### 437A Communication in Peace and War (4)

Prereq: sr rank. Draws upon the literature of international relations, political science, engineering and communication. Examines, among other things, the power of and effects of international telecommunications on peace and war; the audiences of peace and war communications; potential peacekeeping assignments for the mass media; case studies of communication and conflict in the Middle East, Iran, Central America; new telecommunications technologies and their use in international conflict resolution.

#### 446A Images of the Handicapped Portrayed in Literature (4)

Prereq: sr rank. Provides critical inquiry into portrayal of handicapped in popular literature and media analyzing how those images influence attitudes of general public toward handicapped persons. Focuses on traditional stereotypes of handicapped persons evident in classical literature, changing roles of handicapped in literature, newly emerging trends in depicting handicapped, and use of literature to influence attitude change.

#### 446C Disabilities as Portrayed in the Media (4)

Prereq: sr rank, perm. and Tier II social science. Examines the evolution of the media's portrayal of persons with disabilities. Specifically, by applying relevant interdisciplinary theories and perspectives, selected films and television programs will be analyzed to determine the extent and manner in which selected media have impacted on society's perceptions and attitudes.

#### 450A Environmental Assessments (5)

Prereq: sr rank. Acquaints student with how to determine whether emissions to air, water, or land pose danger to people or environment. Presents Environmental Protection Agency's environmental assessment procedure and discusses its strengths and weaknesses. Discusses why this new, radically different procedure is needed. Covers economic, physiological, social, and political implications of environmental assessment.



**450B Technology and Culture (4)**

Prereq: sr rank. Intended to provide a synthesis experience for seniors around the topic of engineering and technology and their interactions with and effects on society. Students will have an opportunity to stand outside their particular major and to interact with other specialists to see what they can do to provide clarity of purpose and direction to the technological questions facing humankind.

**453A The Art of Modeling by Computer (4)**

Prereq: sr rank or perm. Examines techniques of modeling of social-economic-technical systems. Small models developed on topics related to student backgrounds. Large existing models examined to see structure, assumptions, and sensitivity to changing conditions. Computer techniques included.

**463A Architecture and Theatrical Performance (4)**

Prereq: sr rank. Focuses on the interaction of two arts: how theater space is designed and how that space influences theatrical performance.

**464A Cultural Traditions and the Arts (4)**

Prereq: sr rank. (fall) Principal styles of Western art as mirrored in selected masterpieces of architecture, sculpture, painting, music, and literature. Specific works of art examined in relationship to one another and against background of ideas that animated life of their times (Greek, Roman, Medieval).

**464B Cultural Traditions and the Arts (4)**

Prereq: sr rank. (winter) Principal styles of Western art as mirrored in selected masterpieces of architecture, sculpture, painting, music, and literature. Specific works of art examined in relationship to one another and against background of ideas that animated life of their times (Renaissance, Baroque).

**464C Cultural Traditions and the Arts (4)**

Prereq: sr rank. (spring) Principal styles of Western art as mirrored in selected masterpieces of architecture, sculpture, painting, music, and literature. Specific works of art examined in relationship to one another and against background of ideas that animated life of their times (19th and 20th centuries).

**464D The Dionysian Myth in the Arts (4)**

Prereq: sr rank. Classical mythology concerning Dionysus and Orpheus presented as narrative. Subsequent selections by artists of portions of those narratives analyzed intrinsically and extrinsically to reveal: (1) changing concepts of myth as seen in artifact created by different artists, media, and period; and, (2) unique limitations and potential of each artistic media to give expression to those changing concepts. Seeks synthesis not only between myth and arts but also between arts and society.

**470A Social Crises in Medicine (4)**

Prereq: sr rank. Virtually every medical advance is accompanied by complex set of poorly understood ethical, legal, political, and economic considerations. Course provides students with opportunity to explore in depth all dimensions of crisis that have arisen involving practice of medicine or provision of health care.

**472A Self, Aging, and Society (4)**

Prereq: sr rank. Interrelates knowledge of aging, modes of thought, and values to each other and to practical problems in life, society and culture, and world of work. Focuses primarily on biological, psychological, sociological, health care, and public policy aspects of gerontology. Designed to analyze in an interdisciplinary way basic assumptions of aging, process of theory construction, interrelationship of theory and research, procedures of empirical investigation, implications of older age structure for American society, and problems of aged in American society.

**472B Food Problems and Third World Development (4)**

Prereq: sr rank. Provides students with knowledge and understanding of various factors involved in struggle for achieving food security in Third World countries. Focuses on political, economic, educational, health, environmental, social, and cultural factors and how they impact on food security. Also focuses on AIDS and how it has affected agricultural production, marketing, and distribution. Diversities among Third World countries, policy changes, and strategies in relation to world food security also explored.

**472C Women and Leadership: Roles and Responsibilities (4)**

Prereq: sr rank or perm; PSY 101 or SOC 101. Analysis of women in leadership roles in relation to historical, sociological, psychological, and economic perspectives. Strategies for developing leadership skills integrated throughout course.

**472D Thanatology (4)**

Prereq: sr rank or perm; SOC 101 and PSY 101. Synthesizes components inherent in current philosophical and religious views and beliefs, psychological and clinical dimensions, sociological factors, and ethical and moral issues of death in context of defining and coping with death.

**472F Mental Health: Social, Economic, and Political Impact (4)**

Prereq: sr rank or perm. This course examines the social, legal, economic, and political impact of mental illness and mental health care on society, public policy, and on related fields of study.

**474A Brainscape: The Integrative Brain (4)**

Prereq: sr rank or perm. An interdisciplinary course that guides students in an exploration of the functions of the human brain. Integrates information on such topics as movement control and awareness; sensorimotor integration; language development and use; feelings, emotions, and drives; left brain, right brain; neural rhythmicity; levels of consciousness; and states of mind. Using this integrative information base, students explore and discuss mechanisms and evidences of such human attributes as thought and intellect; learning and memory; play; reason, and decision-making.

**480B Two Decades in Confrontation: The Art and the History of the 1950s and the 1960s (4)**

Prereq: sr rank. Taught by professor of history and professor of art. Opportunity for majors in arts and in social sciences to search for motivations and values in recent U.S. history by reviewing arts and political, social, and scientific events of two postwar decades, 1950s and 1960s.

**480C Unity and Variety in Biology and Literature (4)**

Prereq: sr rank or perm; Tier II coursework in botany or English. Unity and variety between and within literature and biology studied primarily by critically examining selected works of Charles Darwin, English naturalist, and Walt Whitman, American poet. Thoughts of these two men analyzed by comparing views on selected set of topics: origins of life and of humans, evolution, nature, and influence of environment. Focus is primarily on these two figures; other writers such as Chardin and Thoreau may be treated briefly.

**480D Emergence of a Science (4)**

Prereq: 1 course in science or philosophy; sr rank. For both science and nonscience majors interested in historical and philosophical influences that led to present concept of chemistry as science. Chronological survey, largely nontechnical, of developments in chemistry from Thales to Russell. Not acceptable for 400-level requirement in B.S. chemistry degree program.

**480E War: The Human Response (4)**

Prereq: sr rank, 12 hrs in psychology or English. Human response to war considered in terms of myths of heroism and masculinity, nature of conflict, use and justification of aggression, perception of enemy, effects on both victims and victimizers, and irony of war. Human response examined both from subjective perspective of creators of literature of war and from objective perspective of psychologists who study individual and group behavior in times of conflict.

**480F Life Sciences, Communication, and Media (5)**

Prereq: sr rank; 2 qtrs of biology. Integration of scientific information with written and verbal communication skills. Students will be exposed to recent advances in life sciences and have opportunity to analyze and write on these advances.

**480G Schooling and the State (4)**

Prereq: sr rank, Tier II course in philosophy. Critical inquiry into how education, through citizenship preparation, has been seen by liberal, conservative, and socialist philosophers as resolving social crises. Particular attention to eras of extreme social crisis such as Great Depression and recent decades. Use of popular literature and source documents to relate educational prescriptions to current topics in education.

**480K Meaning in Music (4)**

Prereq: sr rank. Survey of recent and historical attempts to explain relationships between musical stimuli and their musical or extramusical referents. Representative musical works examined in light of these theories.

**480L The Nuclear Era (5)**

Prereq: sr rank or perm. Concentrates on historical, political, and scientific implications of development and evolution of nuclear weapons. Addresses, among other issues, such questions as why nuclear weapons were developed, scientific principles upon which they work and their physical effects, successes and failures of international efforts to control them, and their impact upon contemporary political, military, and ethical issues.

**480M Gandhi and King: Nonviolence as Philosophy and Strategy (5)**

Prereq: sr rank. An interdisciplinary analysis of nonviolence.

**480N Who Controls Science? (4)**

Prereq: sr rank. The line of inquiry which a scientist pursues is often idealized as being chosen out of his or her intellectual curiosity about specific natural phenomena. Often, in fact, external pressures determine which lines of inquiry are pursued, whether the results are disseminated, and who is allowed to pursue the "quest." This course will use specific events and questions in the history of scientific research to explore cultural, industrial, and political attempts to direct or suppress scientific inquiry and/or the dissemination of scientific information.

**480P Ethical Issues in the Human Services (4)**

Prereq: sr rank, Tier II course in humanities or social sciences. Examines variety of ethical issues facing human service workers (social workers, psychologists, counselors, etc), including questions of truth-telling and confidentiality, paternalism and self-determination, distributive justice (allocation of resources), etc. Model for analyzing these issues is presented.

**480Q Popular Media: Critical and Empirical Approaches (4)**

Prereq: sr rank, TCOM 106 or 170 or 4 hrs of non-Tier I English. One purpose of course is to ask to what extent quantification of elements of popular fiction, film, and television is helpful in criticism of those forms. Other purpose is to address related but opposite question of whether criticism of those popular forms as it is commonly practiced — that is, more subjectively — can help to raise more interesting and complex issues than empirical studies of those forms have generally considered.

**480R War: Historical and Dramatic Perspectives (4)**

Prereq: sr rank and 4 hrs of history, political science, or theater. Through vehicle of history and drama, examines way in which America has been affected by warfare in 20th century. Dramas studied from historical and theatrical perspectives for insights they offer about history of American society during wartime.

**480T Where Science and Politics Meet: Science Policy in the U.S. (4)**

Prereq: POLS 101 or laboratory science course, sr rank. Considers the intersection of science and politics. Investigates how government affects science, how scientists become involved in political decisions, and how scientific information is used in public policy making. It examines the values and methods of both science and politics, traces the historical development of science policy, and analyzes contemporary issues where science and politics meet.

## UNIVERSITY COLLEGE

**110 Effective Study Skills (2)**

Prereq: fr or perm. Helps students assess present study behaviors and attitudes and adopt techniques that increase their effectiveness in managing time, taking notes, reading and organizing text material, and preparing for exams. Emphasizes regular practice and use of skills taught.

**110A Time Management and Test Taking Skills (1)**

Prereq: fr or perm. Concentrates on managing time and preparing for and taking examinations. UC 110A and 110B combined duplicate UC 110.

**110B Notetaking from Lectures and Textbooks (1)**

Prereq: fr or perm. Helps students improve their ability to select important information in lectures, discussions, and textbooks, organize it in note form, and review it frequently. Emphasizes regular practice and use of organized notetaking systems. UC 110A and 110B combined duplicate UC 110.

**112 College Reading Skills (2)**

Prereq: fr or perm. Focuses on improving comprehension, interpretation, and evaluation of reading materials that are typical of college

courses. Moves from short passages to longer selections. Includes speed reading techniques and vocabulary building. Emphasizes practice and application of skills.

**112A Reading: Comprehending Textbooks (1)**

Prereq: fr or perm. Focuses on comprehension skills needed for reading college-level materials and a study system to help students read textbooks more efficiently. UC 112A plus 112B duplicates UC 112.

**112B Reading: Improving Speed and Vocabulary (1)**

Prereq: fr or perm. Helps students increase their reading speeds and learn to appropriately adjust these speeds for different types of reading materials and tasks. In addition, students learn effective techniques for developing a college-level vocabulary. UC 112A plus 112B duplicates UC 112.

**114 College Reading and Study Skills (4)**

Prereq: fr or perm. Combines UC 110 and 112 as described above. No duplicate credit given for either 110 or 112.

**115 The University Experience (2)**

Prereq: fr rank. To help students adapt to demands of University as academic environment; assessing interests, values, and abilities; developing communication and coping skills; exploring academic majors and their requirements; establishing educational and career goals.

## UNIVERSITY PROFESSOR

Courses are offered each year by the six University Professors selected the preceding academic year. The courses cover topics chosen by the professors themselves, and may be offered only twice through the University Professor program. Often University Professor courses have joint freshman and upperclass sections. As the courses are special offerings, no permanent listing of descriptions in this catalog is possible. See your college office for descriptions and registration information, or come to University College, 140 Chubb Hall.

Generally, a University Professor course offered within the professor's area of training and expertise will count toward area requirements of different colleges, where applicable. Otherwise the credit fulfills elective credit hours. *Be sure to check with your college office regarding application of University Professor course credit to college requirements.*

**150 University Professor**

Title, prereq, and credit hrs published in *Schedule of Classes*. Fall qtr fr-level UP course.

**151 University Professor**

Title, prereq, and credit hrs published in *Schedule of Classes*. Winter qtr fr-level UP course.

**152 University Professor**

Title, prereq, and credit hrs published in *Schedule of Classes*. Spring qtr fr-level UP course.

**450 University Professor**

Title, prereq, and credit hrs published in *Schedule of Classes*. Fall qtr upperclass-level UP course.

**451 University Professor**

Title, prereq, and credit hrs published in *Schedule of Classes*. Winter qtr upperclass-level UP course.

**452 University Professor**

Title, prereq, and credit hrs published in *Schedule of Classes*. Spring qtr upperclass-level UP course.

## VISUAL COMMUNICATION

The curriculum in visual communication includes the courses listed below plus a variety of photojournalism and picture editing courses offered through the E.W. Scripps School of Journalism and an equally varied selection of photo communication and photo illustration courses in the School of Art.

For more information, see a detailed description of the program in the College of Communication section of this catalog or the College of Fine Arts section.

#### 120 Introduction to Visual Communication (4)

A survey of visual communication theory and technology of visual communication from ancient cave drawings to digital computer images.

#### 121 Visual Communication Delivery Systems (4)

Theory and practice of visual communication techniques in printed media.

#### 220 Topic Seminar (2)

Prereq: 120 or perm. Examines the foundations of visual communication through the ages. Looks at the works of various photographic communicators and discusses how visual communication can inform, stimulate emotions, and influence viewers. May take up to 4 hrs. toward graduation.

#### 311 Information Graphics (5)

Prereq: ART 251, JOUR 235, VICO 320, or perm. The visual presentation of quantitative and spatial information. Examines the planning, design, and computer preparation of charts, graphs, diagrams, and maps for use in newspapers and magazines.

#### 314 Desktop Publishing (5)

Prereq: VICO 320, or jr rank, or perm. An introduction to the production, design, and techniques of desktop publishing. Explores the many software packages for desktop publishing for microcomputers with emphasis on the presentation of visual material on the page.

#### 320 Topic Seminar (2)

Prereq: ART 397, JOUR 325, or perm. A flexible format for examining current and future topics in visual communication. Because of constantly changing trends in the profession, topics will vary as an area of need not covered in an existing class is identified. Topics will include the rapid areas of change such as technology, techniques, ethics, and aesthetics.

#### 323 Publication Layout and Design (3)

Prereq: JOUR 221, 235, VICO 320. Examines historic and contemporary theories of layout and make-up design. Using computer systems that simulate pagination programs, students will investigate methods of combining type, graphics, and photographs on the printed page.

#### 412 Advanced Informational Graphics (5)

Prereq: 311. Visual presentation of spatial information with emphasis on design and production techniques as they pertain to newspapers and magazines.

#### 421 Documentary/Essay (5)

Prereq: ART 398 or JOUR 326. The use of still photography as a tool for social, anthropological and, journalistic investigation of contemporary issues. Using methods defined by traditional field researchers, the class will expand the use of the photograph for collection and interpretation of selected subjects.

#### 426 Advanced Publication Layout and Design (3)

Prereq: 323. Advanced study in the use of computers as a tool for layout, design and pagination for print media.

#### 427 Advanced Photographic Illustration: Business Practices (5)

Prereq: ART 388, ART 397, perm. An investigation of the principals of studio management. Areas of study will include: copyright, computer usage, self-promotion, financial management.

#### 428 Advanced Photographic Illustration: Studio Practices (5)

Prereq: ART 388, ART 397, perm. Advanced studio methods in the design and execution of illustration images. Particular emphasis will be placed on the professional performance in producing images using advanced equipment and techniques.

#### 429 Advanced Photographic Illustration: Applications (5)

Prereq: ART 388, ART 397, perm. A synthesis of business and photographic skills. Students will be given simulations based on a complete project concept that reflects the realities of working professionally.

## WOMEN'S STUDIES

### Women's Studies Certificate Program

This program is available as an option in any baccalaureate degree program offered by the University, regardless of the college in which the student is enrolled.

The requirements for the certificate are WS 100 Introduction to Women's Studies, 22 additional quarter hours earned in classes on the designated core list below, and WS 400.

	Credits
AAS 345 The Black Woman .....	4
AAS 482 The Black Family .....	4
ENG 153A Freshman Composition: Special Topics (Women and Men in Literature) .....	5
ENG 318 Women and Literature .....	4
ENG 319J Women and Writing .....	4
HIST 314 Women in American History .....	4
HIST 360 Women in European History .....	4
HIST 381 History of the Family .....	4
HLTH 427 Health of Women .....	4
HIPES 400 Women in Sports .....	3
INCO 420 Gender and Communication .....	4
INCO 422 Communication in the Family .....	4
LING 390 The Languages of Men and Women .....	3
POLS 319 Gay Politics .....	4
POLS 420 Women, Law, and Politics .....	4
POLS 478 Feminist Political Theories and Movements .....	5
PSY 378 Psychology of Gender .....	4
SOC 220 Introduction to the Family .....	4
SOC 370 Sex Roles and Inequality .....	4
SOC 467 Violence Against Women .....	4
TCOM 481 Women and the Media .....	4
WS 100 Introduction to Women's Studies .....	4
WS 400 The New Scholarship on Women: The Question of Difference .....	4

Additional courses are currently being developed. Experimental courses and certain courses offered under special topics and special studies rubrics will also count as core courses under appropriate conditions. The student should see the women's studies director for additional information on courses. The women's studies certificate is awarded upon graduation from Ohio University and the award is recorded on the permanent record (transcript). Students seeking the certificate must consult the director prior to the deadline for graduation to ensure that the certificate will be awarded.

#### 100 Introduction to Women's Studies (4) (2H)

Study of female experience, drawing on materials from literature, autobiography, philosophy, history, law, myth, religion, and social sciences. Looks at cultural beliefs about women's nature and role in different times and places, representation of women and their relationships with others in myth and literature, and women's efforts to define new identity through work, creative activity, and through feminism, both historically and at present. Current issues explored.

#### 400 The New Scholarship On Women: The Question of Difference (4)

Prereq: 100 or any course cross-listed under women's studies, sr rank; or perm. Question of sexual differences has both plagued and motivated contemporary feminist analyses. Course will explore what new scholarship on women going on in diverse disciplines contributes to question of differences between women and men.

#### 490 Independent Reading (1-4)

Prereq: perm. Directed individual reading or research.

## ZOOLOGICAL AND BIOMEDICAL SCIENCES

### Microbiology Major

(Major code #0411)

The minimum major requirements for the ASM-accredited B.S. in microbiology are as follows: MICR 325, 411, 412, 413, 415, 419, 425, and at least 10 credits from the following: 414A, 414B, 416, 418, 441. Extradepartmental courses required include: ZOOL 170, 171, 172, 173, CHEM 151, 152, 153, 241, 242, 301, 302, 490, 491, 492, PHYS 201, 202, 203, MATH 163A, 163B, CS 220.

A minor in microbiology requires a minimum of 23 hours of microbiology courses which must include MICR 411 and 412. In addition, the prerequisites for MICR 411 are required: 10 hours biology, CHEM 301.

### Zoology Major

(Major code #2121)

The major requirements for the A.B. and B.S. in zoology degrees are a minimum of 40 and 50 quarter hours respectively in approved departmental courses which must include the following: 170, 171, 172, 173, 325, and one course from each of the following areas: a) anatomy/organismal: 301, 303, 430, 435, 471, 474; b) physiology: 345, 448, 460; c) ecology/evolution: 275, 425, 479; d) biochemistry: 463 or CHEM 490 and 491; e) other biol. sci: BOT 111, MICR 411. Extradepartmental courses required for both the A.B. and B.S. degrees are: CHEM 151, 152, 153 and 301, 302 or 305, 306, 307; MATH 163A and B or 263A and B; PHYS 201, 202 (203 may be required for some graduate programs); PSY 121.

In addition to major programs, the Department of Zoological and Biomedical Sciences offers a minor in zoology. Requirements for the minor in zoology consist of a minimum of 28 credit hours of coursework in zoology, including ZOOL 170, 171, 172, 173, and 325, and at least two other courses at the 300 level or above.

### Other Programs

Other programs are outlined in the College of Arts and Sciences section of this catalog for students preparing for dentistry, environmental biology, exercise physiology, marine and freshwater biology, medical technology, medicine, optometry, pharmacy, physical therapy, veterinary medicine, wildlife biology, and zoology-nutrition, any one of which may also lead to a baccalaureate degree with a major in zoology. The outlined curricula should be consulted regarding the specific requirements for each; they may contain different sets of requirements from those given in the above paragraph. Students who wish to teach and also receive the A.B. or B.S. degree with a major in zoology or microbiology must satisfy requirements for both teaching certification and the major.

No grade which proves to be honestly and correctly issued by a departmental faculty member will be changed.

### Microbiology

#### 201 Elementary Microbiology (4) (2N)

Prereq: one quarter biological science and chemistry. (Zanesville campus only, spring) Medical microbiology; topics include microbial and fungal growth, metabolism, and genetics; antimicrobial chemotherapy; principles of immunology, microorganisms, and infectious diseases. 3 lec., 2 lab.

#### 211 Environmental Microbiology (4) (2A)

Prereq: one qtr biological science or chemistry or perm. (fall, spring) *R. Downey, E. Rowland*. Natural microbial activities, their function in waste and pollution reclamation and disposal, water purification, food production and spoilage, and in public health. 4 lec.

#### 212 Environmental Microbiology Laboratory (2) (2A)

Prereq: 211 or with 211. (spring) *E. Rowland*. Characteristics and activities of microbes of special relevance to humans' welfare and those affecting maintenance of environmental quality. 4 lab.

#### 298T Microbiology Tutorial (1-15)

*M. White*. Special courses offered to students in Honors Tutorial program.

#### 299T Microbiology Tutorial (1-15)

*M. White*. Continuation of 298. See 298T for description.

#### 325 General Genetics (5)

Prereq: ZOOL 172, 173 or BOT 111. (fall, spring) *C. Atkins, M. White*. Principles and concepts of genetics as revealed by classical and modern investigation. 5 lec.

#### 398T Microbiology Tutorial (1-15)

*M. White*. Special courses offered to students in Honors Tutorial program.

#### 411 General Microbiology (6)

Prereq: 10 hrs biological science; CHEM 301. (fall, winter, spring, odd yrs) *S. Maier, R. Downey, C. James*. Properties of bacteria, protista, and viruses and their importance in our environment. Lab training in common microbiological methods. 3 lec, 6 lab.

#### 412 Microbiological Techniques (5)

Prereq: 411, perm. (winter) *S. Maier*. Semi independent course gives microbiology major extensive experience in use of microbiological techniques and equipment; information retrieval. 2 lec, 8 lab.

#### 413 Pathogenic Bacteriology (6)

Prereq: 411. (spring, odd yrs) *M. Modrzakowski*. Microorganisms in relation to disease. Disease manifestations, diagnostic and control methods; some aspects of immunity. 3 lec, 6 lab.

#### 414A Animal Virology (4)

Prereq: 411. (spring, even yrs) *C. James*. Emphasis on the study of those events following virus-cell interaction which are critical to viral replication and pathology. Modern methods of isolation and identification of viruses will also be studied. 4 lec.

#### 414B Animal Virology Laboratory (2)

Prereq: 414A, or concurrent; 411; perm. (spring, even yrs) Limited to microbiology majors, others by perm if seats available. 4 lab.

#### 415 Immunology (6)

Prereq: 411. (winter) *M. Powell*. Fundamental principles and concepts of immunity and the immune response. 4 lec., 4 lab.

#### 416 Immunochemistry (6)

Prereq: 415. (spring) *M. Powell*. In-depth study of the molecules involved in the immune response with emphasis on antibody/antigen interactions and immunochemical techniques. 3 lec, 6 and arr lab.

#### 418 Epidemiology (4)

Prereq: perm. (fall) *W. Romoser*. Modes of spread, cure, and prevention of communicable diseases in humans. 4 lec.

#### 419 Microbial Physiology (6)

Prereq: 411, 463 or equiv. (spring) *S. Maier*. Nutrition, function, and metabolism of microorganisms; pertinent lab work illustrating fundamental principles and various experimental techniques. 3 lec, 6 lab.

#### 425 Microbial Genetics (3)

Prereq: 325, 411 (winter, alt. yrs.) *J. Jollick*. Intended for students majoring in microbiology, molecular biology, or applied biotechnology. microbial genetics is an in-depth study of the genetics of selected procaryotes and their viruses. Topics include the genetic elements of bacteria, mutations and mutagenesis, lysogeny, and phage conversion, mechanisms of gene transfer and recombinations, regulation of gene expression and recombinant DNA.

#### 441 Parasitology (6)

Prereq: ZOOL 172, 173. (spring) *O. Heck*. Etiology of human parasites, their transmission, diagnosis, and prevention. 3 lec, 6 lab.

#### 463 Cell Chemistry (4)

Prereq: organic chemistry. (fall) *J. Wilson, L. Wince*. Chemistry of carbohydrates, lipids, proteins, and nucleic acids. Principles of enzyme activity and kinetics; metabolic pathways and regulation. 4 lec.

#### 482 Topics in Microbiology (1-6, max 8)

Prereq: 20 hrs of microbiology including 411; 2.5 g.p.a. in major courses; perm from specific professor. Individual or small-group study of specialized topics in microbiology under supervision of instructor. Special registration with departmental secretary absolutely required.

#### 485 Undergraduate Research (1-3, max 12)

Prereq: 20 hrs and 2.5 g.p.a. in microbiology; perm from specific professor. Independent research under supervision of staff member. Special registration with departmental secretary absolutely required.

**4851H Undergraduate Research (1-4, max 12)**

Prereq: 3.2 g.p.a. in microbiology, perm from specific professor. Individualized and directed research. Students select topics or are directed into possible research areas. Special registration with departmental secretary absolutely required.

**4951H Undergraduate Research (Thesis) (3-9, max 15)**

Prereq: 4851H, 3.0 g.p.a. in sciences, sr rank. Independent departmental honors research under supervision of staff member. Student should enroll qtr he or she expects to complete thesis. Special registration with departmental secretary absolutely required.

**498T Microbiology Tutorial (1-15)**

*M. White*. Special courses offered to students in Honors Tutorial program.

## Zoology

**100 The Animal Kingdom (4) (2N)**

(winter) *M. Chamberlin, M. White*. Designed for nonscience majors. A broad survey of all of the major groups of animals. Aspects of the biology, reproduction, ecology, and evolution of the animal phyla. Credit not allowed for both 100 and 173.

**101 Principles of Biology (5) (2N)**

Designed for nonscience majors. Principles of cell biology, physiology, ecology, genetics, and evolution. (Same as BOT 101.) Credit not allowed for both 101 and 170 or 101 and BOT 101 or 101 and BOT 110. 4 lec, 2 lab.

**103 Human Biology (5) (2N)**

Designed for nonscience majors. Humans as living organisms: our origins, ecology, and inheritance; and functioning of our body systems. 5 lec.

**130 Principles of Human Anatomy and Physiology I (5) (2N)**

(Zanesville campus only) Introduction to the structure and function of the human body in the study of cells, tissues, and the integumentary, skeletal, and muscular systems. Cat used for dissection. 3 lec, 4 lab.

**131 Principles of Human Anatomy and Physiology II (5) (2N)**

Prereq: 130. (Zanesville campus only) Introduction to the structure and function of the human body in the study of the digestive, urinary, reproductive, cardiovascular, lymphatic, respiratory, endocrine, and nervous systems. Cat used for dissection. 3 lec, 4 lab.

**170 Introduction to Zoology (5)**

Prereq: HS chem., and top 25% of class, or ACT 23 or SAT 1000. No credit if ZOO 101, or BOT 101 or 110 taken. (summer, fall) Cellular and molecular biology. Designed for science majors and preprofessional students. Introduction to the chemistry of life, cell structure and function, and the principles of inheritance. Laboratories enhance lecture coverage of major topics with emphasis on experimental design and critical analysis. 4 lec, 3 lab.

**171 Introduction to Zoology (5) (2N)**

Prereq: 170 or BOT 110. (summer, winter) Animal organ systems. Designed for science majors and preprofessional students. Introduction to multicellular life, organ systems, physiology, and animal development. Laboratories enhance lecture coverage of major topics with dissections and experiments; emphasis is on comparative strategies within the animal kingdom. 4 lec, 3 lab.

**172 Introduction to Zoology (3) (2N)**

Prereq: 171. (fall, spring) *J. Rovner*. Evolutionary biology. Designed for science majors and preprofessional students. Introduction to the principles of evolution, ecology, and behavior. 3 lec.

**173 Introduction to Zoology (1) (2N)**

Prereq: 171. (fall, spring) *M. Nossek*. Laboratory survey of the major phyla of the animal kingdom to reveal evolutionary relationships and structural and functional characteristics. Credit not allowed for both 100 and 173. 2 lab.

**225 Genetics in Human Society (3) (2N)**

Prereq: H.S. or college biology (for non-zoology majors; no credit for those who have credit for 325). (winter) *M. White*. Basic principles of inheritance in humans. Normal and abnormal chromosome constitutions, gene-protein interrelationships, and factors that cause mutations of genes and chromosomes. Significance of genetics in life of human society. 3 lec.

**275 Animal Ecology (4)**

Prereq: 1 college-level course in biology. (fall) *J. Ahlquist*. Relation of animals to their habitats, to each other, and to humans. Population and community dynamics in terrestrial and aquatic ecosystems; consideration of naturally and human-stressed environments.

**297T Zoology Tutorial (1-15)**

*M. White*. Special courses offered to students in Honors Tutorial program.

**298T Zoology Tutorial (1-15)**

*M. White*. Continuation of 297T. See 297T for description.

**299T Zoology Tutorial (1-15)**

*M. White*. Continuation of 297T-298T. See 297T for description.

**300 Anatomy and Histology (6)**

Prereq: 171 or with perm; not open to fr; may be taken concurrently with 345. (spring) *R. Hikida*. Gross and microscopic structure of the basic tissues and organ systems of the human body. Cat used for dissection. Human systems also used. No credit if 301 or 303 taken. 4 lec, 4 lab.

**301 Human Anatomy (6)**

Prereq: 101, not open to fr. (fall, winter) *F. Hagerman*. Structure of body systems with particular emphasis on human skeletal and neuro-muscular systems. Cat used for dissection. 3 lec, 6 lab.

**303 Comparative Vertebrate Anatomy (6)**

Prereq: 172, 173, not open to fr. (winter) *J. Ahlquist*. Comparative study of body systems of vertebrates, with lab work covering various type forms. 3 lec, 6 lab.

**325 General Genetics (5)**

Prereq: 172, 173, or BOT 111. (fall, spring) *C. Atkins, M. White*. Principles and concepts of genetics as revealed by classical and modern investigation. 5 lec.

**326 Laboratory Genetics (4)**

Prereq: 325. (winter, alternate yrs) *J. Jollick, M. White*. Experiments with *Drosophila*, bacteria, and bacterial viruses designed to illustrate principles of genetics. Survey of basic molecular genetics techniques. 6 lab.

**345 Human Physiology (4)**

Prereq: 300 or 301 or concurrently with 300 or 301; not open to fr. (spring) *F. Hagerman*. Functions of various systems as applied to humans. Special reference to physiological adaptations to environment and regulatory functions. For education, medical technology, exercise physiology, health and sports sciences, dietetics, and pre-physical therapy students only.

**346 Human Physiology Laboratory (3)**

Prereq: anatomy, 345 or with 345. (spring) *R. Gilders, W. Haviland*. Lab experiences designed to complement material covered in 345. For pre-physical therapy students; others by perm only. 6 lab.

**352 Biomechanics (4)**

Prereq: 301. Analysis of human motion based on anatomical and mechanical principles. 4 lec. Credit not allowed for both 352 and HPES 302.

**364 Forensic Biology (4)**

Prereq: 300 or perm; for forensic chemistry students only. (spring, alternate yrs) *K. Goodrum, O. Heck*. Provides experience in microscopic techniques; identification of hair and fibers, identification and grouping of blood including chemical, immunological, and electrophoretic methods, and identification of semen. 2 lec, 4 lab.

**376 Field Ecology (3)**

Prereq: 172, 173, or 275, ZOO major or perm. (spring) *G. Svendsen*. (fall) *W. Hummon*. Analysis of field problems in ecology; consisting of design of field experiments and hypothesis testing, techniques to gather and analyze field data, interpretation of results, and report writing. 6 lab.

**382 Topics in Zoology (1-3, max 8)**

Prereq: 101 or BOT 101, perm of specific instructor. Individual or small-group study, under supervision of instructor, of topics not otherwise available to undergrad students. Credit not applicable toward major and minor in zoology or microbiology. Special registration with departmental secretary absolutely required.

**382A Clinical Laboratory Observation (1)**

Prereq: med. tech. major. *E. Rowland*. Gives student opportunity to observe activities characteristic of clinical lab. Observations made



in hospital setting so that, along with other background information provided, student may be better able to evaluate lab work as career choice.

**384 Bioethics: Bioethical Problems in Biology and Medicine (5)**

Prereq: 9 hrs biology. *D. Mowry*. (Lancaster campus only) Ethical problems arising from rapid advances in biological and biomedical research. Topics include: human experimentation, fetal research, informed consent, death with dignity, euthanasia, biological engineering, reproductive advances, sex control, test tube babies, surrogate mothers, behavioral modification with drugs, electronics and surgery, health care delivery, mental health, and genetic screening. 5 lec.

**390H Biology and the Future of Man (5)**

Prereq: perm. *D. Mowry*. (Lancaster campus only) Course covers human sexuality, physiological effects of environmental pollutants, drugs of abuse, and introduction to advances in biological technology that influence future of humans. 5 lec.

**397T Zoology Tutorial (1-15)**

*M. White*. Special courses offered to students in Honors Tutorial program.

**398T Zoology Tutorial (1-15)**

*M. White*. Continuation of 397T. See 397T for description.

**399T Zoology Tutorial (1-15)**

*M. White*. Continuation of 397T-398T. See 397T for description.

**402 Human Neuroanatomy (3)**

Prereq: 301, 345, prephysical therapy major or perm. (fall) *E. Peterson, M. Rowe, R. DiCaprio, L. Luckenbill*. Detailed anatomy of human brain with functional and clinical considerations. Students will do a complete brain dissection. Students will be assessed by means of a lab practical and two written exams. 2 lec, 2 lab.

**406 Vertebrate Embryology (6)**

Prereq: 300 or 303. (winter, spring) Development from gametogenesis to organogenesis in representative vertebrate types. Lab emphasis given to early chick and pig development. 4 lec, 4 lab.

**407 Developmental Biology (4)**

Prereq: perm. (spring, alt years) *L. Luckenbill*. Mechanisms of animal development at tissue, cellular, and molecular levels of organization, with emphasis on experimental approaches. 4 lec.

**408 Histology (6)**

Prereq: 303. (winter) *O. Heck*. Cells, tissues, and organ systems with regard to their morphological and physiological properties. 4 lec, 4 lab.

**409 Neurobiology I (4)**

Prereq: 448 or perm. (fall, alt yrs) *E. Peterson, M. Rowe*. Introduction to neurobiology, beginning with in-depth consideration of anatomy and physiology of neurons, and using these concepts to develop understanding of vertebrate sensory systems: vision, audition, somesthesia, lateral line sense, chemical senses, infra-red and magnetic field detection, electroreception. Emphasizes physical and ecological factors that influence design of sensory systems.

**410 Neurobiology II (4)**

Prereq: 409 or perm. (winter, alt yrs) *E. Peterson, M. Rowe*. Builds on Neurobiology I to develop understanding of neural control of effector systems and sensory-motor integration: control of movement by brain and spinal cord; molecular mechanisms of movement; escape and startle behaviors; orientation to sensory stimuli; locomotion; feeding; social behaviors.

**420 Animal Locomotion (4)**

Prereq: 303 or perm. (winter) *J. Thomason*. Introductory course that describes basic mechanical, behavioral, and ecological aspects of animal locomotion. Some anatomy and physics background required.

**425 Evolutionary Genetics (4)**

Prereq: 325, PSY 121 or equiv. (fall) *J. Ahlquist, M. White*. Basic concepts of population genetics (mutation, gene flow, natural selection, genetic drift). Rates, patterns, and processes of molecular evolution at the population and species level. The use of analytical techniques for the elucidation of phylogenies. 4 lec.

**429 Marine Biology (5)**

Prereq: 172, 173, perm; 430 recommended. (spring) *W. Hummon*. Biological processes in marine and estuarine habitats, and adaptations for life in sea; emphasis on environmental variables affecting

distribution, abundance, and dynamics of marine organisms. Includes 5-day field trip to temperate marine environment late in qtr; estimated cost \$80 per student; limited to 12 students. 5 lec, field trip.

**430 Invertebrate Zoology (6)**

Prereq: 172, 173, or perm. (spring, alt yrs, alternating with 431) *W. Hummon*. Structure, function, development; systematic, and ecological relationships among nonvertebrate metazoans, excluding most parasites and terrestrial arthropods. 4 lec, 4 lab.

**431 Limnology (5)**

Prereq: 172, 173, BOT 111, CHEM 153, or equiv. or perm. (spring, alt yrs, alternating with 430 & 468) *W. Hummon*. Physical, chemical, and biological processes in standing and running water habitats; emphasis on analysis of data from freshwater systems; distribution, abundance, and dynamics of populations; structure, organization, and productivity of communities; lab emphasis on acid mine pollution. 4 lec, 3 lab.

**434 Biology of Spiders (5)**

Prereq: 172, 173. (winter) *J. Rouner*. Morphology, physiology, behavior, ecology, and classification of spiders. Lab emphasizes taxonomic studies. 3 lec, 4 lab.

**435 Entomology (6)**

Prereq: 172, 173 or BOT 111 or perm. (spring, alt. yrs.) *W. Romoser*. Overview of insect biology. Lecture: insect morphology, physiology, behavior, systematics, evolution, and ecology. Lab: emphasis on insect collection and identification. 4 lec, 4 lab.

**441 Parasitology (6)**

Prereq: 172, 173. (spring) *O. Heck*. Etiology of human parasites, their transmission, diagnosis, and prevention. 3 lec, 6 lab.

**445 Physiology of Exercise (4)**

Prereq: 345; 446 conc. For prephysical therapy, exercise physiology, dietetics, and athletic training students only. (fall) *F. Hagerman*. Fundamental concepts describing reaction of organ system to exercise/muscle metabolism and work evaluation; special reference to physical fitness, sport conditioning, and environmental adaptations to exercise. 4 lec. (Same as HPES 414.)

**446 Physiology of Exercise Laboratory (3)**

Prereq: 345; 445 conc. For prephysical therapy, exercise physiology, dietetics, and athletic training students only. (fall) *R. Gilders, T. Murray*. Lab experiences designed to complement 445. 6 lab. (Same as HPES 415.)

**448 Cell Physiology (4)**

Prereq: organic chemistry, physics recommended. (winter) *J. Wilson*. Analysis of fundamental cellular activities with emphasis on membrane structure and function, bioelectric potentials, contractile mechanisms. Also includes mitochondrial and chloroplast structure and function, bioluminescence, chromatophore activity, cell growth and development, and evolution of eukaryotic and prokaryotic cells. 4 lec.

**449 Cell Physiology Laboratory (4)**

Prereq: 448, or with 448 or perm. (winter) *J. Wilson*. Lab experiments designed to illustrate experimental bases of principles of cell chemistry and physiology. 8 lab.

**450 Principles of Endocrinology (4)**

Prereq: 460 or 448 recommended. (winter, alt. years) *A. Loucks, R. Portanova*. Endocrine control of mammalian homeostasis and metabolism. 4 lec.

**452 Reproductive Physiology (3)**

Prereq: 450, perm. (spring, alt. yrs.) *F. Murray*. Reproductive physiology: development, maturation, reproductive cycles, gametogenesis, fertilization, implantation, pregnancy, lactation, and environment and behavior. Emphasis on mammals.

**457 Animal Systematics (4)**

Prereq: 172, 173 and 325; 477 or 479. (fall; alternate yrs) *S. Moody*. Principles and methods of systematic zoology. Numerical methods and hypothetical deductive reasoning applied to study of organismic diversity (taxonomy) and geographic distribution (zoogeography). Use of computer stressed. 3 lec, 2 hr disc. and computer work.

**460 Animal Physiology (4)**

Prereq: 172, 173; org chem, phys recommended. (spring) *J. Wilson*. Principles of animal physiology with emphasis on comparative,



regulatory, and adaptive aspects of neuromuscular and neuroendocrine regulation, circulation, excretion, and osmotic and temperature regulatory mechanisms. 4 lec.

#### 461 Animal Physiology Laboratory (4)

Prereq: 460 or with 460, or perm. (spring) Lab exercises designed to illustrate experimental basis of principles covered in 460. 8 lab.

#### 463 Cell Chemistry (4)

Prereq: CHEM 302; CHEM 123 for HEFN. (fall) *J. Wilson, L. Winice*. Chemistry of carbohydrates, lipids, proteins, and nucleic acids. Principles of enzyme activity and kinetics; metabolic pathways and regulations. 4 lec.

#### 464 Physiological Chemistry Lab (3)

Prereq: with or following 463 or 448. (fall, winter) *J. Gault, J. Wilson*. Basic procedures in qualitative and quantitative analysis of biological compounds. 6 lab.

#### 466 Neurophysiology (4)

Prereq: 448 or 460, or perm. (winter, alternate yrs) *W. Costello*. Basic aspects of cellular neurobiology; overall introduction to neurophysiology by an evolutionary approach to the study of excitable cells, from simple to complex nervous systems. Lectures and student seminars.

#### 467 Neurophysiology Laboratory (2)

Prereq: 466 or with 466 (winter, alternate yrs) *W. Costello*. Lab sessions using advanced techniques in cellular neurobiology to illustrate lecture topics in 466. Training in manufacture and use of bioelectrodes. Some reports required in form of journal article.

#### 468 Ichthyology (4)

Prereq: 303; 460 or 448. (spring; alternate yrs) *J. Eastman*. Lecture course emphasizing selected aspects of biology of major families of freshwater and marine fishes. Topics include morphology, physiology, taxonomy, evolution, ecology, behavior, and zoogeography. 4 lec.

#### 470A,B,C,D Medical Technology Clinical Internship

52-week clinical internship includes theoretical and practical coursework in all phases of clinical lab science at accredited school of medical technology. Required for certification as a medical technologist.

#### 471 Ornithology (5)

Prereq: 479. (fall) *D. Miles*. Bird biology, including discussions on behavior, adaptations, life histories, and role of ornithology in current ecological theory. 4 lec, 3 lab, and field.

#### 472 Herpetology (5)

Prereq: 20 hrs zoology including 303 or 460 or equivalent. (spring, odd yrs) *S. Moody*. Biology of amphibians and reptiles. Lectures emphasize anatomy, physiology, ecology, behavior, taxonomy, and geography. Labs and field trips emphasize species of Ohio and families of U.S.A. 3 lec, 4 lab and field.

#### 473 Animal Behavior (5)

Prereq: 172, 173 or perm. (winter) *J. Rovner*. Ecological, physiological, and developmental aspects of animal behavior, interpreted from perspective of evolutionary biology. 5 lec.

#### 474 Mammalogy (6)

Prereq: 172, 173. (fall) *G. Svendsen*. Mammals; their origin, evolution and adaptations, geographical distribution, ecology, and systematics. Emphasis on local fauna. 4 lec, 4 lab, and field.

#### 475 Sociobiology (3)

Prereq: 479 or perm. (spring; alternate yrs) *G. Svendsen*. Current understanding of how and why animal social behavior evolved, including spacing, mating, and parental behavior of solitary as well as social animals. Lectures, reading, and reports. 3 lec.

#### 477 Population Ecology (4)

Prereq: 275, 376, PSY 121 or equiv. (winter, even years) *D. Miles*. Major theories and concepts in populations and evolutionary ecology. Emphasis on theoretical, field, and experimental studies pertaining to growth and regulation of populations; population interactions, including predation and competition, distribution and abundance, and life history theories. 4 lec.

#### 478 Community Ecology (4)

Prereq: 477 or equivalent and perm. (winter, odd years) *D. Miles*. This course will provide a theoretical and empirical examination of the description, structure, and organization of communities. Emphasis will be placed on mathematical models that describe the biotic processes that mold community structure. Further consideration of null models in ecology and historical effects will be included. 4 lec.

#### 479 Evolution (4)

Prereq: 325. (winter) *G. Svendsen*. Current concepts of evolutionary processes; sources of variability, adaptation, speciation, coevolution, and phylogeny. 4 lec.

#### 480 Biological Research Methods (2-4)

Prereq: perm.

#### 482 Topics in Zoology (1-6, max 8)

Prereq: 20 hrs of zoology including 172, 173; 2.5 g.p.a. in major courses, perm from specific professor. Individual or small-group study of specialized topics in zoology under supervision of instructor. Special registration with departmental secretary absolutely required.

#### 485 Undergraduate Research (1-3, max 12)

Prereq: 20 hrs and 2.5 g.p.a. in zoology, perm from specific professor. Independent research under supervision of staff member. Special registration with departmental secretary absolutely required.

#### 485H Undergraduate Research (1-4, max 12)

Prereq: 3.2 g.p.a. in zoology, perm from specific professor. Individualized and directed research. Students select topics or are directed into possible research areas. Special registration with departmental secretary absolutely required.

#### 495H Undergraduate Research (Thesis) (3-9, max 15)

Prereq: 485H. 3.0 g.p.a. in sciences, sr rank. Independent departmental honors research under supervision of staff member. Student should enroll qtr he or she expects to complete thesis. Special registration with departmental secretary absolutely required.

#### 497T Zoology Tutorial (1-15)

*M. White*. Special courses offered to students in Honors Tutorial program.

#### 498T Zoology Tutorial (1-15)

*M. White*. Continuation of 497T. See 497T for description.

#### 499T Zoology Tutorial (1-15)

*M. White*. Continuation of 497T-498T. See 497T for description.

The following listings were submitted by the dean's office in each college in May 1991 and verified in the Provost's Office. The regional campus faculties are listed after the main campus faculty.

## Accounting

**O'Brien Prof:** E. James Meddaugh, Ph.D., *Penn State U., C.P.A.*  
**Prof:** Charles H. D'Augustine (emeritus, part-time), Ph.D., *Florida State U., C.P.A.*; Warren Reininga (emeritus, part-time), M.C.S., *Indiana U., C.P.A.*; William Voss, Ph.D., *U. of Chicago.*

**Assoc. Prof:** Ted Compton (chair), Ph.D., *U. of Cincinnati, C.M.A., C.S.P.*; James S. Cox, Ph.D., *U. of Pittsburgh, C.P.A.*; Leon Hoshower, Ph.D., *Michigan State U., C.P.A.*; Florence Sharp, Ph.D., *U. of Illinois, Urbana-Champaign, C.P.A.*; Robert Sharp, Ph.D., *U. of Texas, Austin, C.P.A.*; Clarence B. Stephenson (emeritus, part-time), M.B.A., *George Washington U., C.P.A.*; Donald V. Stuchell, M.A.S., *U. of Illinois, C.P.A.*

**Asst. Prof:** Carol A. Hilton, Ph.D., *U. of Arkansas*; Joseph N. Hilton, Ph.D., *U. of Arkansas.*

**Instr:** Olin Adams III, M.B.A., *Mount Saint Mary's College, C.P.A.*

## Aerospace Studies

**Prof:** Paul K. Birchak (chair), M.S., *U. of Arkansas.*

**Asst. Prof:** David E. Schmitt, M.B.A., *U. of Northern Colorado*; Randy L. Shuman, M.S., *U. of Alaska.*

## Afro-American Studies

**Prof:** Francine C. Childs, Ed.D., *East Texas State U.*

**Assoc. Prof:** Robert Rhodes, M.A., *U. of Cincinnati and M.S., Atlanta U.*; Vattel T. Rose (chair), Ph.D., *U. of Minnesota.*

## Art

**Prof:** Terrill Eiler, M.F.A., *Ohio U.*; Abner Jonas, M.F.A., *U. of Iowa*; David R. Klahn, M.F.A., *U. of Wisconsin, Madison*; William Kortlander, Ph.D., *U. of Iowa*; Ronald Kroutel, M.F.A., *U. of Michigan*; Karen Nulf, M.A., *Michigan State U.*; Gary Pettigrew, M.F.A., *Ohio U.*; Donald Roberts (emeritus, part-time), M.F.A., *Ohio U.*; Daniel Williams, M.A., *U. of Oregon.*

**Assoc. Prof:** Marilyn Bradshaw, Ph.D., *Indiana U.*; Robert Borchard, M.S., *U. of Wisconsin*; Aethelred Eldridge, M.S.D., *U. of Michigan*; Erik Forrest, A.T.D., *U. of Edinburgh*; Mary Manusos, M.F.A., *U. of Wisconsin*; Robert Peppers, M.F.A., *Ohio U.*; Judith Perani, Ph.D., *Indiana U.*; Marilyn Poeppelmeyer, M.F.A., *SUNY, Buffalo*; Gary Schwindler, Ph.D., *U. of California, Los Angeles.*

**Asst. Prof:** B. Deahl, B.A., *U. of Iowa*; Eva Enderlein, M.F.A., *Indiana U.*; Robert Lazuka, M.F.A., *Arizona State U.*; Charles McWeeny, M.F.A., *Oklahoma U.*; Fiona Mitchell, M.F.A., *U. of Oklahoma*; Karlyn Norum, M.A., *Vermont College*; Brad Schwieger, M.F.A., *Utah State U.*; Mark Uskavitch, M.F.A., *Virginia Commonwealth U.*

## Aviation

**Assoc. Prof:** Joan Mace (chair), B.S., *Ohio U.*

**Asst. Prof:** Ronald Faliszek, B.B.A., *Ohio U.*

**Instr:** Joseph Kuhn, B.G.S., *Ohio U.*; David Lipsey, A.A.S., *Ohio U.*; David E. Samuels (part-time), B.S.A.S., *Ohio U.*

## Botany

**Dist. Prof:** Norman Cohn, Ph.D., *Yale U.*

**Prof:** James Braselton, Ph.D., *Iowa State U.*; James Cavender, Ph.D., *U. of Wisconsin*; Laurence Larson, Ph.D., *Purdue U.*; Robert Lloyd, Ph.D., *U. of California, Berkeley*; John Mitchell, Ph.D., *Edinburgh U.*; Gar Rothwell, Ph.D., *U. of Alberta*; Ivan Smith (chair), Ph.D., *U. of London*; Irwin Ungar, Ph.D., *U. of Kansas.*

**Assoc. Prof:** Philip Cantino, Ph.D., *Harvard U.*; James Herbert Graffius, Ph.D., *Michigan State U.*

**Asst. Prof:** Jan Salick, Ph.D., *Cornell U.*; Allan M. Showalter, Ph.D., *Rutgers U.*; Arthur T. Trese, Ph.D., *U. of Missouri.*

## Chemistry

**Dist. Prof:** William Huntsman, Ph.D., *Northwestern U.*

**Prof:** David Hendrick, Ph.D., *Iowa State U.*; Robert Ingham, Ph.D., *Iowa State U.*; Peter Johnson, Ph.D., *U. of Birmingham*; Robert Kline, Ph.D., *U. of Wisconsin, Madison*; Howard Latz, Ph.D., *U. of Florida*; Paul Sullivan (chair), Ph.D., *U. of Waterloo*; Robert Symson, Ph.D., *U. of Illinois*; James Tong, Ph.D., *U. of Wisconsin, Madison*; Thomas Wagner, Ph.D., *Northwestern U.*; Robert Winkler, Ph.D., *U. of Michigan.*

**Assoc. Prof:** John Blazyk, Ph.D., *Brown U.*; Jared Butcher, Jr., Ph.D., *U. of Tennessee*; Gary Pfeiffer, Ph.D., *Carnegie Mellon U.*; Gary Small, Ph.D., *U. of North Carolina*; Gene Westenbarger, Ph.D., *U. of California, Berkeley.*

**Asst. Prof:** Howard D. Dewald, Ph.D., *New Mexico State U.*; Karen E. Eichstadt, Ph.D., *U. of Kansas*; Peter deB. Harrington, Ph.D., *U. of North Carolina*; Frederick R. Lemke, Ph.D., *Purdue U.*; Keith F. McDaniel, Ph.D., *Princeton U.*; Mark C. McMills, Ph.D., *Michigan State U.*; Hugh H. Richardson, Ph.D., *Oklahoma State U.*; Martin T. Tuck, Ph.D., *U. of Tennessee.*

## Classical Languages

**Assoc. Prof:** Robert Stephen Hays (chair), Ph.D., *U. of Texas, Austin*; Harry A. Hultgren, M.A., *U. of Kentucky.*

**Asst. Prof:** James A. Andrews, Ph.D., *U. of California, Berkeley*; William Owen, Ph.D., *Yale U.*

## Communication Systems Management

**Assoc. Prof:** Phillis W. Bernt (director), Ph.D., *U. of Nebraska, Lincoln.*

**Asst. Prof:** Thomas Dunlap, M.S., *Ohio U.*; Dennis Fouty, M.B.A., *U. of Nebraska*; Hans Kruse, Ph.D., *Vanderbilt U.*; Don Manley, J.D., *George Mason U. School of Law*; Anthony G. Mele, B.S., *Ohio U.*

## Comparative Arts

**Prof:** Robert Wortman (emeritus, part-time), Ph.D., *Florida State U.*

**Assoc. Prof:** Jessica Haigney, Ph.D., *Ohio U.*; Michael Harper, Ph.D., *U. of North Carolina, Chapel Hill*; Richard Tobin, Ph.D., *Bryn Mawr College.*

## Computer Science

**Prof:** Richard Butrick, Ph.D., *Columbia U.*; Yin-Min Wei, Ph.D., *U. of Iowa*; J. Langdon Taylor, Ph.D., *U. of California, Los Angeles.*

**Assoc. Prof:** Klaus Eldridge, Ph.D., *U. of Colorado*; J. Craig Farrar (chair), Ph.D., *U. of Illinois*; John Gillam, Ph.D., *Michigan State U.*; Mohammad Meybodi, Ph.D., *Oklahoma U.*

**Asst. Prof:** H. Cem Bozsahin, Ph.D., *Arizona State U.*; Larry Irwin, M.S., *Ohio U.*

## Dance

**Prof:** Gladys Bailin (director), B.A., *Hunter College.*

**Assoc. Prof:** Patricia Brooks, B.S., *Wayne State U.*; Madeleine Scott, M.A., *U. of California, Los Angeles.*

**Asst. Prof:** Michelle Geller, M.F.A., *New York U. School of the Arts*; Andre Gribou, M.M., *Julliard School of Music*; Marina Walchi, M.F.A., *Ohio U.*

**Lect:** Frederick Kraps (part-time).

## Economics

**Dist. Prof:** Lowell Gallaway, Ph.D., *Ohio State U.*; Lee Soltow (part-time), Ph.D., *U. of Wisconsin, Madison*; Richard Vedder, Ph.D., *U. of Illinois.*

**Prof:** Douglas Adie, Ph.D., *U. of Chicago*; Edwin Charle, Ph.D., *Indiana U.*; Burton DeVau (emeritus, part-time), Ph.D., *U. of Minnesota*; Ismail Ghazalah, Ph.D., *U. of California, Berkeley*; David Klingaman, Ph.D., *U. of Virginia*; Rajindar K. Koshal, Ph.D., *U. of Rochester*; Vishwa Shukla, Ph.D., *U. of Wisconsin, Madison.*

**Assoc. Prof:** Roy Boyd, Ph.D., *Duke U.*; Khosrow Doroodian, Ph.D., *U. of Oregon*; Jan Palmer (chair), Ph.D., *Michigan State U.*

**Asst. Prof:** Gregg Frasco, Ph.D., *Cornell U.*; Chulho Jung, Ph.D., *U. of Michigan*; Kathryn G. Marshall, Ph.D., *U. of California, Berkeley*; Rosemary Rossiter, Ph.D., *U. of Wisconsin, Milwaukee.*

**Instr:** Constantina Backinezos, Ph.D., *Penn State U.*; Frank Kelly, M.A., *Indiana U.*

## Education-Applied Behavioral Sciences and Educational Leadership

**Prof:** Robert Barcikowski, Ph.D., *SUNY, Buffalo*; Gilford Crowell (emeritus, part-time), Ed.D., *U. of Missouri*; Fred Dressel, Ed.D., *Indiana U.*; Max Evans, Ph.D., *Ohio State U.*; James Grubb (emeritus, part-time), Ph.D., *Ohio U.*; Luther Haseley, Ed.D., *U. of Toledo*; Donald Knox, Ed.D., *Case Western Reserve U.*; Richard Miller, Ph.D., *Columbia U.*; Thomas Sweeney, Ph.D., *Ohio State U.*; Melvin Witmer, Ph.D., *Florida State U.*

**Assoc. Prof:** Thomas Davis, Ph.D., *Ohio State U.*; Glenn Doston, Ph.D., *Northwestern U.*; Paul Dressel, Ph.D., *Wayne State U.*; Crystal Gips, Ed.D., *Boston U.*; Sally Navin, Ph.D., *Ohio State U.*

**Asst. Prof:** Patrieta Beamish, Ed.D., *West Virginia U.*; James Hartman, Ph.D., *Kent State U.*; Richard Hazler, Ph.D., *U. of Idaho*; George Johanson, Ed.D., *U. of Massachusetts*; Lisa Lopez Levers, Ph.D., *Kent State U.*; Frances Pearson, Ph.D., *Ohio State U.*

**Instr:** David Aiken, M.Ed., *Ohio U.*; Anthony Mele, B.S.C., *Ohio U.*

## Education-Curriculum and Instruction

**Prof:** Jason Brunk, Jr. (emeritus, part-time), Ed.D., *U. of Maryland*; Larry Jageman, Ed.D., *U. of Northern Colorado*; Monroe Johnson, Ed.D., *U. of Tennessee*; Albert Leep, Ed.D., *Ball State U.*; Ralph Martin, Ph.D., *U. of Toledo*; Ragy Mittas, Ph.D., *Ohio State U.*; Leonard Pitkaart, Ed.D., *U. of Virginia*; Reba Pinney (emerita, part-time), Ph.D., *Ohio U.*; Milton Ploghoft, Ed.D., *U. of Nebraska*; William Rader, Ph.D., *Purdue U.*; Stephen Safran, Ph.D., *U. of Virginia*; H. Wells Singleton (dean), Ph.D., *Stanford U.*; Ray Skinner (emeritus, part-time), Ph.D., *Kent State U.*; Charles Smith, Jr., Ed.D., *Wayne State U.*; Edward Stevens, Jr., Ed.D., *U. of Rochester*; Seldon Strother, Ph.D., *Kent State U.*; James Thompson, Ph.D., *Ohio State U.*; George Wood, Ph.D., *U. of Illinois*.

**Assoc. Prof:** Arthur Clubok, Ph.D., *U. of Michigan*; Sondra Rebolchini, Ed.D., *West Virginia U.*; Barbara Reeves, Ed.D., *U. of Kentucky*; Scott Sparks, Ph.D., *U. of Florida*.

**Asst. Prof:** Bonnie Beach, Ph.D., *Ohio U.*; Geraldine Berry, Ph.D., *U. of Pittsburgh*; Carol Christy, Ph.D., *Ohio State U.*; Michael Flenister, M.A., *Central Michigan U.*; R. Keith Hallkirk, Ph.D., *Penn State U.*; W. Stephen Howard, Ph.D., *Michigan State U.*; John McCutcheon, Ed.D., *Indiana U.*; Joan McMath, Ph.D., *U. of Akron*; Evelyn Reid, Ph.D., *U. of Wisconsin, Madison*; Sallie Roberts, M.A., *Ohio U.*; Marta Roth, Ed.D., *West Virginia U.*; William Smith, Ed.D., *Indiana U.*; James Yanok, Ph.D., *Kent State U.*

**Instr:** Andrea Negangard, M.A., *Ball State U.*

## Education-Professional Laboratory Experiences

**Prof:** Samuel Bolden (director), Ed.D., *Auburn U.*

**Assoc. Prof:**

**Instr:** Bonnie Bailey, M.Ed., *Indiana U. of Pennsylvania*; Diane Burkhardt, M.Ed., *Kent State U.*; Howard Delamatre, M.Ed., *Bowling Green State U.*; Marlene Domo, M.A., *Pontifical College Josephinum*; Ann Mayle, M.Ed., *Ohio U.*; Jane Meyers, M.Ed., *Ohio U.*

## Engineering, Chemical

**Prof:** William Baasel, Ph.D., *Cornell U.*; Calvin Baloun, Ph.D., *U. of Cincinnati*; Nicholas Dinos, Ph.D., *Lehigh U.*; W. Paul Jepson (chair), Ph.D., *Heriot-Watt U., Scotland*; Harold Kendall (emeritus, part-time), Ph.D., *Case Institute of Technology*; Michael Prudich, Ph.D., *West Virginia U.*

**Assoc. Prof:** Wen-Jia Russell Chen, Ph.D., *Syracuse U.*; Kendree Sampson, Ph.D., *Purdue U.*

**Asst. Prof:** Daniel Gulino, Ph.D., *U. of Illinois, Urbana-Champaign*; Darin Ridgway (visiting prof.), Ph.D., *Florida State U.*

## Engineering, Civil

**Prof:** Glenn Hazen (chair), Ph.D., *Penn State U.*; Harry Kaneshige, Ph.D., *U. of Wisconsin, Madison*; Shad Sargand (Russ Prof.), Ph.D., *Virginia Polytechnic Institute and State U.*

**Assoc. Prof:** Tiao Chang, Ph.D., *Purdue U.*; Gayle Mitchell, Ph.D., *Mississippi State U.*; Edward Russ (emeritus, part-time), M.S.C.E., *Clarkson College of Technology*.

**Asst. Prof:** William Greer, Ph.D., *U. of Arizona*; Joseph Recktenwald, Ph.D., *U. of Akron*; Eric P. Steinberg, M.S., *Michigan Tech. U.*

## Engineering, Electrical and Computer

**Prof:** Hollis Chen, Ph.D., *Syracuse U.*; Joseph Essman, Ph.D., *Purdue U.*; James Gilfert (emeritus, part-time), Ph.D., *Ohio State U.*; Herman Hill, Ph.D., *West Virginia U.*; Harry Hoffee (emeritus, part-time), M.S.E.E., *Ohio U.*; Harold Klock, Ph.D., *Northwestern U.*; Robert Lilley (part-time), Ph.D., *Ohio U.*; Henryk Lozykowski, Ph.D., *N. Copernicus U.*; Brian Manhire, Ph.D., *Ohio State U.*; Richard McFarland (Russ Prof., emeritus, part-time), Ph.D., *Ohio State U.*; Jerrel Mitchell (Russ Prof., chair), Ph.D., *Mississippi State U.*; M.E. Mokari, Ph.D., *U. of Illinois*; Roger Radcliff, Ph.D., *West Virginia U.*; Janusz Starzyk, Ph.D., *Technical U., Warsaw*.

**Assoc. Prof:** Mehmet Celenk, Ph.D., *Stevens Institute of Technology*; Robert Curtis, Ph.D., *New York U.*; R. Dennis Irwin, Ph.D., *Mississippi State U.*

**Asst. Prof:** Jeffrey Dill, Ph.D., *U. of Southern California*; Jeffrey Giesey, M.S., *U. of Michigan*; Douglas Lawrence, M.S., *Johns Hopkins U.*; Joseph H. Nurre, Ph.D., *U. of Cincinnati*; John Tague, Ph.D., *Penn State U.*; Frank van Graas, Ph.D., *Ohio U.*; Constantinos Vassiliadis, Ph.D., *Mississippi State U.*; Aysin Yeltekin, Ph.D., *U. of Southern California*.

**Instr:** Victor Hanna (part-time), M.S., *Youngstown State U.*

## Engineering, Industrial and Systems

**Prof:** Charles Overby (emeritus, part-time), Ph.D., *U. of Wisconsin, Madison*; Donald Scheck (emeritus, part-time), Ph.D., *Purdue U.*; Ralph Smith (acting chair, emeritus, part-time), M.S.M.E., *U. of Wisconsin, Madison*; Robert Williams, Ph.D., *Ohio State U.*; Helmut Zwahlen (Russ Prof.), Ph.D., *Ohio State U.*

**Assoc. Prof:** E. Ralph Sims (part-time), M.B.A., *Ohio U.*

**Asst. Prof:** Katsundo Hitomi (visiting prof.), Ph.D., *Kyoto U.*; Thomas A. Laeksonen, M.S., *U. of South Florida*; Nur Ozdemirel, Ph.D., *Arizona State U.*; Luis Rabelo, Ph.D., *U. of Missouri*; Thomas Velasco (visiting prof.), Ph.D., *U. of Arkansas*.

## Engineering, Mechanical

**Prof:** O.E. Adams, Jr. (emeritus, part-time), Ph.D., *Lehigh U.*; Jay Gunasekera (Moss Prof.), Ph.D., *U. of London*; Lewis Hicks (emeritus, part-time), M.S., *Johns Hopkins U.*; Roy Lawrence (chair), Ph.D., *Southern Methodist U.*; T. Richard Robe, Ph.D., *Stanford U.*

**Assoc. Prof:** Khairul Alam, Ph.D., *California Institute of Technology*; Mohammad Dehghani, Ph.D., *Louisiana State U.*; Gary Graham, Ph.D., *Texas Technical U.*; Kenneth Halliday, Ph.D., *U. of Massachusetts*; Israel Urieli, Ph.D., *Witwatersrand U.*

**Asst. Prof:** Sunil Agrawal, Ph.D., *Stanford U.*; Brian C. Fabien, Ph.D., *Columbia U., New York*; Bhavin Mehta (part-time), M.S., *Ohio U.*

## English

**Dist. Prof:** John Matthews, M.A., *Ohio State U.*

**Prof:** Laurence Bartlett, Ph.D., *Michigan State U.*; Frank Cronin, Ph.D., *U. of Pittsburgh*; Samuel Crowl, Ph.D., *Indiana U.*; James Davis, Ph.D., *Florida State U.*; Robert DeMott, Ph.D., *Kent State U.*; Wayne Dodd, Ph.D., *U. of Oklahoma*; Raymond Fitch, Ph.D., *U. of Pennsylvania*; Roy Flannagan, Ph.D., *U. of Virginia*; Peter Heidmann, Ph.D., *U. of Wisconsin, Madison*; John Hollow (chair), Ph.D., *U. of Rochester*; Daniel Keyes, M.A., *CUNY, Brooklyn*; Earl Knies, Ph.D., *U. of Illinois*; Julia Lin, Ph.D., *U. of Washington*; Dean McWilliams, Ph.D., *U. of Oregon*; Lester Marks, Ph.D., *Syracuse U.*; Cosmo Pieterse, M.A., *U. of Cape Town*; Vance Ramsey, Ph.D., *U. of Oklahoma*; Barry Roth, Ph.D., *Stanford U.*; Duane Schneider, Ph.D., *U. of Colorado*; Eve Shelnutt, M.F.A., *U. of North Carolina, Greensboro*; Harold Swardson, Ph.D., *U. of Minnesota*; Calvin Thayer, Ph.D., *U. of California, Berkeley*; James Thompson, Ph.D., *U. of Cincinnati*; Arvin Wells, Ph.D., *U. of Michigan*.

**Assoc. Prof:** Marilyn Atlas, Ph.D., *Michigan State U.*; David Bergdahl, Ph.D., *Syracuse U.*; Susan Crowl, Ph.D., *Indiana U.*; David Heaton, Ph.D., *U. of Michigan*; Janis Holm, Ph.D., *U. of Michigan*; Linda Hunt, Ph.D., *U. of California, Berkeley*; Reid Huntley, Ph.D., *U. of North Carolina, Chapel Hill*; Ernest Johansson, Ph.D., *U. of North Carolina, Chapel Hill*; Peter Kousaleos, Ph.D., *Ohio U.*; William Kuhre, Ph.D., *Penn State U.*; Ben Park, Ph.D., *U. of Oklahoma*; Betty Pytlík, Ph.D., *U. of Southern California*; Mark Rollins, Ph.D., *U. of Massachusetts, Amherst*; Arthur Woolley, Ph.D., *U. of Wisconsin, Madison*.

**Asst. Prof:** Tom Andrews, M.F.A., *U. of Virginia*; Paul Dombrowski, Ph.D., *Rensselaer Polytechnic Institute*; Christine Freeman, Ph.D., *Kent State U.*; Loreen Giese, Ph.D., *Emory U.*; Mara Holt, Ph.D., *U. of Texas*; David Lazar, Ph.D., *U. of Houston*; Kristi Leatherwood, Ph.D., *Ohio U.*; Robert Miklitsch, Ph.D., *SUNY, Buffalo*; Charles Naccarato, Ph.D., *Ohio U.*; Lowell Ver Heul, Ph.D., *Ohio U.*; Valerie Worthy, Ph.D., *Ohio U.*; Linda Zionkowski, Ph.D., *Northwestern U.*

**Instr:** David Bruce, M.A., *Ohio U.*; Jane Denbow, M.A., *Marshall U.*; Thomas Mantey, M.A., *Ohio U.*; Joan Zook, M.A., *U. of Michigan*.

## Film

**Prof:** David Prince, M.F.A., *Ohio U.*; George Semsel, Ph.D., *Ohio State U.*; David O. Thomas (director), Ph.D., *Southern Illinois U.*

**Assoc. Prof:** J. Russell Johnson, M.F.A., *U. of Utah*

**Asst. Prof:** Ruth Bradley, Ph.D., *U. of Michigan*; Jeanne Lynn Hall, Ph.D., *U. of Wisconsin*.

## Finance

**O'Brien Prof. of Banking and Finance:** Ganas K. Rakes (chair), D.B.A., *Washington U.*

**Prof:** Azmi D. Mikhail, Ph.D., *Ohio State U.*; Harlan R. Patterson, Ph.D., *Michigan State U.*

**Assoc. Prof:** Dwight A. Pugh, Ph.D., *Ohio U.*

**Asst. Prof:** Bruce S. Berlin, Ph.D., *Michigan State U.*; Jeffrey Allen Manzi, M.B.A., *U. of Akron*.

## Geography

**Prof:** Nancy R. Bain, Ph.D., *U. of Minnesota*; Frank E. Bernard, Ph.D., *U. of Wisconsin, Madison*; Bob J. Walter, Ph.D., *U. of Wisconsin, Madison*; Hubert G.H. Wilhelm, Ph.D., *Louisiana State U.*; Lynden S. Williams (chair), Ph.D., *U. of Kansas*.

**Assoc. Prof:** Hubertus H.L. Bloemer, Ph.D., *Union Graduate School*; James L. Cobban, Ph.D., *U. of California, Berkeley*.

**Asst. Prof:** Ronald H. Isaac, Ph.D., *Southern Illinois U.*; James K. Lein, Ph.D., *Kent State U.*

## Geological Sciences

**Prof:** Moid Ahmad, Ph.D., *U. of London*; Royal Mapes (chair), Ph.D., *U. of Iowa*; Damian Nance, Ph.D., *U. of Cambridge, England*; Geoffrey Smith, Ph.D., *Ohio State U.*; Thomas Worsley, Ph.D., *U. of Illinois*.

**Assoc. Prof:** Gene Heien, M.A., *Indiana U.*

**Asst. Prof:** Douglas Green, Ph.D., *U. of Wisconsin, Madison*; David Kidder, Ph.D., *U. of California, Santa Barbara*.

## Health and Sport Sciences

**Prof:** Clifford Houk, Ph.D., *Montana State U.*; Gari Lesnoff-Caravaglia, Ph.D., *U. of California, Los Angeles*; James A. Lavery (director), P.E.D., *Indiana U.*

**Assoc. Prof:** Franklin B. Carver, Ph.D., *Ohio U.*; Tiff E. Cook, Ph.D., *Walden U.*; Marilyn S. Foster, Ph.D., *Ohio U.*; Marsha Gathron, Ed.D., *Oklahoma State U.*; Charles R. Higgins, Ed.D., *U. of North Carolina, Greensboro*; John McComb (emeritus, part-time), M.Ed., *Boston U.*; Sue Ellen Miller, P.E.D., *Indiana U.*; Owen J. Wilkinson, Ph.D., *Walden U.*

**Asst. Prof:** Patricia Baasel, Ph.D., *Ohio U.*; Catherine Brown, Ph.D., *Ohio State U.*; Susan Bullard, Ph.D., *U. of Wisconsin*; Margaret Christensen, Ed.D., *Oklahoma State U.*; Ronald Dingle, M.S.P.E., *U. of Massachusetts*; Roger Gilders, Ph.D., *Ohio U.*; Richard Hedges, Ph.D., *U. of Kentucky*; David Jacoby, Ph.D., *Ohio U.*; Joyce King (emerita, part-time), Ph.D., *Ohio State U.*; Ernie Randolph, Ph.D., *U. of Oregon*; Lynn Simon (emerita, part-time), P.E.D., *Indiana U.*; Beth VanDerveer, Ph.D., *Texas Woman's U.*; Ronald Whitaker, M.S. Ed., *Ohio U.*; Richard Woolison, M.S. Ed., *Ohio U.*

**Instr:** Carol Ault (part-time), M.S., *Ohio U.*; Sue Hammond (part-time), M.S., *Ohio U.*; Joan Kappes (part-time), M.S. Ed., *Ohio U.*; David Kerns (part-time), M.S., *Ohio U.*; Juli Miller (part-time) M.H.S.A., *Ohio U.*; Thomas Murray (part-time), M.A., *Ohio U.*; Sharon Noel (part-time), M.S.P.E., *Ohio U.*; William Sells (part-time), M.S. Ed., *Ohio U.*; David Stone (part-time), M.A., *U. of Northern Colorado*; Charles Vosler (part-time), M.A. Ed., *Ball State U.*; Katherine Will (part-time), M.H.S.A., *Ohio U.*

## Hearing and Speech Sciences

**Prof:** Joann Fokes, Ph.D., *Purdue U.*; Donald Fucci, Ph.D., *Purdue U.*; Edwin Leach (director), Ph.D., *U. of Kansas*.

**Assoc. Prof:** Dean Christopher, Ph.D., *Ohio State U.*; Norman Garber, Ph.D., *U. of Missouri*; Ronald Isele, M.A., *Kent State U.*

**Asst. Prof:** Emily Buckberry, M.A., *Ohio U.*; Helen Conover, M.A., *Ohio U.*; Richard Dean, Ph.D., *Stanford U.*

**Instr:** Joan Fucci, M.A., *U. of Pittsburgh*; F. Travis Milliken, M.S., *Brigham Young U.*; William Wofolk, M.A., *Eastern Michigan U.*

## History

**Ohio Eminent Research Scholar:** Alfred Eckes, Ph.D., *U. of Texas*.

**Dist. Prof:** Charles Alexander, Ph.D., *U. of Texas*; John Gaddis, Ph.D., *U. of Texas*.

**Prof:** Alan Booth, Ph.D., *Boston U.*; James Chastain, Ph.D., *U. of Oklahoma*; Robert Daniel, Ph.D., *U. of Wisconsin, Madison*; Marvin Fletcher, Ph.D., *U. of Wisconsin, Madison*; Alonzo Hamby, Ph.D., *U. of Missouri*; Donald Jordan, Ph.D., *U. of Wisconsin, Madison*; William Kaldis, Ph.D., *U. of Wisconsin, Madison*; George Lobdell (emeritus, part-time), Ph.D., *U. of Illinois*; Suzanne Miers (emerita, part-time), Ph.D., *U. of London*; Compton Reeves, Ph.D., *Emory U.*; Donald Richter, Ph.D., *U. of Maryland*; Bruce Steiner (chair), Ph.D., *U. of Virginia*.

**Assoc. Prof:** Douglas Baxter, Ph.D., *U. of Minnesota*; Phillip Bebb, Ph.D., *Ohio State U.*; Gifford Doxsee, Ph.D., *Harvard U.*; Phyllis Field, Ph.D., *Cornell U.*; William Frederick, Ph.D., *U. of Hawaii*; Michael Grow, Ph.D., *George Washington U.*; Richard Harvey, Ph.D., *U. of Missouri*; Lyle McGeoch, Ph.D., *U. of Pennsylvania*; Steven Miner, Ph.D., *Indiana U.*; Chester Pach, Ph.D., *Northwestern U.*; Roy Rauschenberg, Ph.D., *U. of Illinois*; Robert Whealey, Ph.D., *U. of Michigan*.

**Asst. Prof:**

## Home Economics

**Prof:** Shirley Slater (part-time), Ph.D., *Ohio State U.*

**Assoc. Prof:** Margaret King, Ed.D., *U. of Massachusetts*; Kyung J. Lee, Ph.D., *U. of Minnesota*; Judy Matthews (director), Ph.D., *Ohio State U.*; Catherine McQuaid-Steiner, Ph.D., *Ohio U.*; Prisca Nemapare, Ph.D., *U. of Tennessee*; Ernest Stricklin, Ph.D., *Boston U.*

**Asst. Prof:** Lee Cibrowski, Ph.D., *Ohio State U.*; Jane U. Edwards, Ph.D., *Purdue U.*; Young Suk Kim, Ph.D., *U. of Maryland*; Donal R. Pierucci (part-time), M.A., *Carnegie Tech*; Catherine M. Prudhoe, Ph.D., *U. of Delaware*; June Varner, Ed.D., *West Virginia U.*

**Instr:** Schuyler Cone, M.S., *Ohio U.*; Virginia A. Paulins, M.S., *Ohio U.*

## Industrial Technology

**Prof:** William Creighton, Jr. (emeritus, part-time), M.Ed., *U. of Cincinnati*; Menno DiLiberto (emeritus, part-time), Ed.D., *U. of Illinois*; James Fales (chair), Ed.D., *Texas A & M*; William Reeves, Ed.D., *U. of Kentucky*; Albert Squibb, D.Ed., *Penn State U.*

**Assoc. Prof:** Richard Nostrant (emeritus, part-time) M.S. Ed., *SUNY,*

*Buffalo*; Arlen Saunders (emeritus, part-time), M.A., *Morehead State U.*; Timothy Sexton, M.S., *Western Illinois U.*

**Asst. Prof:** John Deno, M. Ed., *Ohio U.*; Dinesh Dhamija, M.S., *Ohio U.*; Ernest Gathron, M.S., *Southeastern Oklahoma State U.*; Peter W. Klein, M.Ed., *Colorado State U.*; Patrick J. McCuiston, Ph.D., *Texas A & M.*

## Interpersonal Communication

**Prof:** Paul Boase (emeritus, part-time), Ph.D., *U. of Wisconsin*; Tom Daniels, Ph.D., *Ohio U.*; Sue DeWine (director), Ph.D., *Indiana U.*; Paul Nelson, Ph.D., *U. of Minnesota*; Judy C. Pearson, Ph.D., *Indiana U.*; Lynn Phelps, Ph.D., *U. of Southern California*; John Timmis III (emeritus, part-time), Ph.D., *Penn State U.*

**Assoc. Prof:** Dan Canary, Ph.D., *U. of Southern California*; Charles Carlson (emeritus, part-time), M.Ed., *Kent State U.*; David Descutner, Ph.D., *U. of Illinois*; Ted Foster, Ph.D., *Ohio U.*; Maung Gyi, Ph.D., *Ohio U.*; Claudia Hale, Ph.D., *U. of Illinois*; Anita James, Ph.D., *U. of Southern California*; Ray Wagner, Ph.D., *Ohio U.*

**Asst. Prof:** Roger Aden, Ph.D., *U. of Nebraska*; Elizabeth Graham, Ph.D., *Kent State U.*; Judith Yaross Lee, Ph.D., *U. of Chicago*; Michael Papa, Ph.D., *Temple U.*; Arvind Singhal, Ph.D., *U. of Southern California*.

**Instr:** Cedric Dawkins, M.A., *Ohio U.*; Wendy Papa, M.A., *Central Michigan U.*

**Lect:** Margaret Killough, J.D., *U. of Detroit*.

## Journalism

**Dist. Prof:** Guido Stempel III, Ph.D., *U. of Wisconsin*.

**Prof:** James Alsbrook (emeritus, part-time), Ph.D., *U. of Iowa*; Russell Baird (emeritus, part-time), M.A., *U. of Wisconsin*; Michael Bugeja, Ph.D., *Oklahoma State U.*; Hugh Culbertson, Ph.D., *Michigan State U.*; Dru Riley Everts, Ph.D., *Ohio U.*; Melvin Helitzer, B.A., *Syracuse U.*; Ralph Izard (director), Ph.D., *U. of Illinois*; Ralph Kliesch (emeritus, part-time), Ph.D., *U. of Minnesota*; Donald Lambert, M.A., *Penn State U.*; Charles L. Scott, M.S.J., *Ohio U.*; Patrick Washburn, Ph.D., *Indiana U.*

**Assoc. Prof:** Anne M. Cooper, Ph.D., *U. of North Carolina*; Sandra Haggerty, B.S., *Utah State U.*; Thomas Hodges, M.S., *South Dakota State U.*; Thomas Peters, M.B.A., *Ohio U.*; Robert J. Richardson, M.S., *Ohio U.*; Kae Don Shultz, B.S., *Indiana U.*; Patricia Westfall, M.S., *Columbia U.*

**Asst. Prof:** Joe Bernt, Ph.D., *U. of Nebraska*; Eddith Dashiell, M.A., *Middle Tennessee State U.*; Marilyn Greenwald, M.A., *Ohio State U.*; Judith Yaross Lee, Ph.D., *U. of Chicago*; David London, M.B.A., *St. Mary's College*; Tanya M. Morah, Ph.D., *Ohio U.*; Ron Pittman, M.S., *Marshall U.*; Cassandra Reese, M.B.A., *Governor State*; Frazier Smith, B.A., *Indiana U.*; Robert Stewart, M.A., *U. of Washington*.

**Instr:** Herbert Amey (part-time), B.S.J., *Ohio U.*; Ray Frye (part-time), B.S.J., *Ohio U.*; Carol James (part-time), B.S.J., *Ohio U.*; Paul Reece (part-time), M.Ed., *Antioch U.*; Karl Runser (part-time), B.A., *Ohio U.*

**Asst. Instr:** Richard Bean.

## Linguistics

**Prof:** Zimny Bond, Ph.D., *Ohio State U.*

**Assoc. Prof:** James Coady, Ph.D., *Indiana U.*; Richard McGinn, Ph.D., *U. of Hawaii*; Keiko Koda, Ph.D., *U. of Illinois*; Marmo Soemarmo (chair), Ph.D., *U. of California, Los Angeles*.

**Asst. Prof:** Neil J. Anderson, Ph.D., *U. of Texas*; Beverly Flanigan, Ph.D., *Indiana U.*

**Instr:** Khalil Al-Sughayer, Ph.D., *Michigan State U.*; Joe Amoako, M.A., *U. of Florida*; Miki Shibata, M.A., *Ohio U.*; Suharni Soemarmo, M.A., *U. of California, Los Angeles*; Mei-Hua Zhai, Ph.D., *Ohio U.*

## Management Systems

**O'Brieness Prof:** John R. Schermerhorn, Jr., Ph.D., *Northwestern U. Grad School of Mgt.*

**Lecturer and Executive-In-Residence:** Richard C. Scamehorn, M.B.A., *Indiana U.*

**Prof:** Manjulika Koshal, Ph.D., *Patna U.*; James Lee, D.B.A., *Harvard U.*; Arthur Marinelli (chair), J.D., *Ohio State U.*; James Perotti, Ph.D., *Duquesne U.*; S. Benjamin Prasad (emeritus, part-time), Ph.D., *U. of Wisconsin, Madison*; Lucian Spataro, Ph.D., *U. of Illinois*; John Stinson, Ph.D., *Ohio State U.*; Lane Tracy, D.B.A., *U. of Washington*.

**Assoc. Prof:** Frank Barone, Ph.D., *Ohio State U.*; Thomas Bolland, Ph.D., *U. of Chicago*; Gerald F. Carvalho, Ph.D., *U. of Michigan*; John Day, Ph.D., *Ohio U.*; William Day, D.B.A., *Harvard U.*; Paul Dunlap (emeritus, part-time), Ph.D., *American U.*; Mary Keifer, J.D., *U. of Virginia*; Thomas G. Luce, Ph.D., *Purdue U.*; Clarence Martin, Ph.D., *Carnegie Mellon U.*; Anne H. McClanahan, Ph.D., *Ohio U.*; Valerie Perotti, Ph.D., *Ohio U.*; Bonnie Roach, Ph.D., *Ohio State U.*; Alice Rutkoskie (emerita, part-time), M.S., *Indiana U.*; David Sutherland, Ph.D., *U. of Kansas*; Harvey Tschirgi, Ph.D., *U. of California, Los Angeles*; Edward B. Yost, Ph.D., *Ohio State U.*

**Asst. Prof:** Carl Bridges, M.B.A., *Bradley College*; Garth Coombs, M.B.A., *U. of Denver*; Kenneth Cutright, Ph.D., *West Virginia U.*; Patricia Gunn, J.D., *Boston College*; Ellsworth Holden, M.A., *Harvard U.*; Richard Milter, Ph.D., *SUNY, Albany*; Jessie Roberson, J.D., *U. of Michigan*.

**Instr:** Mark Conrad, M.B.A., *Ohio U.*; Margaret Thomas, M.A., *Ohio U.*; Virginia Woolley (part time), M.A., *U. of Wisconsin, Madison*; Jeanne Zingale (part time), Ph.D., *Kent State U.*

**Lect:** Pamela A. Beger (part time), Ph.D., *Ohio U.*; Corrine Brown (part time), M.B.A., *Ohio U.*; C. Michael Gray (part time), J.D., *U. of Wisconsin*; John Kelfer, J.D., *U. of Virginia*; Peggy Miller, Ph.D., *Ohio U.*; Sharon Morel (part time), M.S., *Ohio U.*; Reid Sinclair (part-time), Ph.D., *Vanderbilt U.*

## Marketing

**Prof:** Ashok Gupta (chair), Ph.D., *Syracuse U.*; Kahanadas Nandola, Ph.D., *U. of Pennsylvania*.

**Assoc. Prof:** Timothy P. Hartman, Ph.D., *Ohio U.*

**Asst. Prof:** Catherine N. Axinn, Ph.D., *Michigan State U.*; Mary Elizabeth Blair, Ph.D., *U. of South Carolina*; William D. Harris III, Ph.D., *U. of Oklahoma*; Daniel E. Inntis, Ph.D., *Ohio State U.*

## Mathematics

**Prof:** Abdol Reza Aftabizadeh, Ph.D., *U. of Texas, Arlington*; Robert Atalla, Ph.D., *U. of Rochester*; Surender Jain, Ph.D., *U. of Delhi*; Donald Norris, Ph.D., *Ohio State U.*; Nicolae Pavel, Ph.D., *U. of Iasi*; Hari Shankar, M.A., *U. of Cincinnati*; Larry Snyder, Ph.D., *Purdue U.*; Shih-Liang Wen (chair), Ph.D., *Purdue U.*; Howard Wicke, Ph.D., *U. of Iowa*; Thomas Wolf, Ph.D., *U. of Wisconsin, Madison*.

**Assoc. Prof:** Sergiu Aizicovici, Ph.D., *U. of Iasi*; Ralph deLaubenfels, Ph.D., *U. of California, Berkeley*; Ellery Golos (emeritus, part-time), M.A., *U. of Michigan*; Elliot Jacobson, Ph.D., *U. of Arizona*; David Keck, Ph.D., *Ohio State U.*; Paul S. Malcom, Ph.D., *Ohio State U.*; Cyrus Mehr (emeritus, part-time), Ph.D., *Purdue U.*; M.S.K. Sastry, Ph.D., *U. of Rochester*; James Shirey, Ph.D., *Purdue U.*; Mary Anne Swardson, Ph.D., *Ohio U.*; Robert Vancko, Ph.D., *Penn State U.*

**Asst. Prof:** Walter Carlip, Ph.D., *U. of Chicago*; Steven A. Chapin, Ph.D., *Rutgers U.*; Jeffery Connor, Ph.D., *Kent State U.*; Winfried Just, Ph.D., *U. of Warsaw*; William E. Kaufman, Ph.D., *U. of Houston*; Sergio Lopez-Permouth, Ph.D., *North Carolina State U.*; Philip J. Moody, Ph.D., *Oxford U.*

## Military Science

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**Asst. Prof:** William Centers, B.S., *U. of Dayton*; Willis F. Jackson, Jr., M.P.A., *U. of La Verne*; Timothy E. Kimmick, M.B.A., *Oklahoma City U.*; James R. Oliver, M.B.A., *Mississippi State U.*; Terrence J. Smith, M.A., *Webster U.*; Stephen A. Stohla, M.S., *U. of Dayton*; Paul A. Stock, B.A., *Oklahoma City U.*

## Modern Languages

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**Assoc. Prof:** Noel Barstad, Ph.D., *U. of Minnesota*; David Burton, Ph.D., *U. of Kentucky*; Carl Carrier, Ph.D., *Indiana U.*; Abelardo Moncayo-Andrade, Ph.D., *U. of Maryland*; C. P. Richardson, M.A., *Ohio U.*; Marie-Claire Wrage, Ph.D., *U. of Wisconsin, Madison*.

**Asst. Prof:** Eloise Boyle, Ph.D., *Ohio State U.*; Grafton Conliffe, Ph.D., *Northwestern U.*; Mary Jane Kelley, Ph.D., *U. of Wisconsin, Madison*; Ruth Nybakken, Ph.D., *Columbia U.*; Herta Rodina, Ph.D., *Harvard U.*; Ann Salomone, Ph.D., *Ohio State U.*; Harriet Tong, Ph.D., *Ohio U.*; Gladys von Hoff, Ph.D., *Ohio U.*

**Lect:** Douglas Hinkle, M.A., *U. of Virginia*; Joseph Ipacs, M.A., *U. of Pennsylvania*; Bartolomeo Martello, M.A., *Michigan State U.*; Henry Silver, M.A., *U. of California, Berkeley*.

**Instr:** Waltraud Bald, M.A., *U. of Michigan*; Joseph Burns, M.A., *U. of Tennessee*; Patricia Lytle, M.A., *U. of California, Santa Barbara*; Betsy Partyka, M.A., *U. of Michigan and Middleburg College*.

## Music

**Prof:** Ernest Bastin, M.M., *U. of Illinois*; Howard Beebe, M.S., *Juilliard School of Music*; William Brophy (emeritus, part-time), M.M., *U. of Illinois*; P. Leighton Conkling (emeritus, part-time), M.M., *Northwestern U.*; Reginald Fink, Ph.D., *U. of Oklahoma*; Eugene Jennings (emeritus, part-time), D.M., *Florida State U.*; David Lewis, Ph.D., *West Virginia U.*; Guy Remonko, M.M., *West Virginia U.*; James Scholten, Ed.D., *U. of Michigan*; Robert Smith (emeritus, part-time), M.M., *Cincinnati Conservatory of Music*; Ronald Socciarelli, M.M., *U. of Michigan*; Margaret Stephenson, M.A., *Columbia Teachers College*; Richard Syracuse, M.S., *Juilliard School of Music*; Richard Wetzel, Ph.D., *U. of Pittsburgh*; Dora J. Wilson, Ph.D., *U. of Southern California*.

**Assoc. Prof:** Gail Berenson, M.M., *Northwestern U.*; Bert L. Damon (acting director), Ph.D., *Florida State U.*; Lucile Jennings, M.A., *Ohio U.*; Michæl Kellogg, M.M., *Loyola U.*; Edward Payne, M.M.,

*Case Western Reserve U.*; Mark Phillips, D.M., *Indiana U.*; Allyn Reilly, Ph.D., *Northwestern U.*; Harold Robison, D.M.A., *U. of Michigan*; James Stewart, Ph.D., *Ohio State U.*; Margene Stewart, M.F.A., *Ohio U.*; Markand Thakar, D.M.A., *U. of Cincinnati*; Sylvester Young, M.M., *Bowling Green State U.*; Ira Zook, D.M.A., *U. of Michigan*.

**Asst. Prof:** Nancy Beebe, M.M., *Ohio U.*; H. Joseph Butler, D.M.A., *Eastman School of Music*; Milton Butler, M.M., *Texas Southern U.*; Peggy A. Coddling, Ph.D., *Florida State U.*; Donna Conaty, M.M., *Yale School of Music*; Pauline Gagliano, M.S., *U. of Illinois*; Peter Jarjisljan, M.M., *Temple U.*; Trygve Peterson, M.M., *Yale School of Music*; Robert Newell, D.M.A., *U. of Illinois*.

## Nursing

**Prof:** Barbara K. Chapman (dean), Ph.D., *Ohio State U.*; Kathleen Rose-Grippa (director), Ph.D., *Stanford U.*

**Assoc. Prof:**

**Asst. Prof:** Maxine Cerra, Ph.D., *Ohio U.*; Emily Harman, M.S.N., *West Virginia U.*; Sharon Mullen, Ph.D., *Ohio U.*; Carla Phillips, Ph.D., *Ohio State U.*; Kathleen Tennant, M.S.N., *West Virginia U.*

## Ohio Program of Intensive English

**Lect:** John Bagnole, M.A., *Georgetown U.*; Joseph Chryst, M.A., *U. of Iowa*; Jean Cunningham, M.A., *Ohio U.*; Barry Emberlin, M.A., *SUNY, Albany*; Linn Forhan, M.A., *Ohio U.*; Cynthia Holliday, M.A., *SUNY, Albany*; David Hopkins, M.A., *School for International Training*; Jack Humbles, M.A., *Ball State U.*; Mary Kaye Jordan, M.A., *Ohio U.*; Gerald Krzic, M.A., *Ohio U.*; John McVicker, M.A., *Kansas U.*; Charles Mickelson, M.A., *Ohio U.*; John W. Miller, M.A., *School for International Training*; Cornelia Pedreau, M.A., *Ohio U.*; Cynthia Yoder, M.A., *Indiana U.*

## College of Osteopathic Medicine

### BASIC SCIENCES

**Prof:** Joseph T. Eastman, Ph.D., *U. of Minnesota*; Peter Johnson, Ph.D., *U. of Birmingham*; Joseph Jollick, Ph.D., *West Virginia U.*; Michael Patterson, Ph.D., *U. of Iowa*

**Assoc. Prof:** Huzoor Akbar, Ph.D., *Australian National U.*; John Blazyk, Ph.D., *Brown U.*; William Blue, Ph.D., *Loyola U.*; Mary Chamberlin, Ph.D., *U. of British Columbia*; Walter Costello, Ph.D., *Boston U.*; Ralph A. DiCaprio, Ph.D., *U. of Alberta*; Kenneth Goodrum, Ph.D., *U. of Texas*; Oscar Heck, Ph.D., *Washington State U.*; John Howell, Ph.D., *U. of California, Los Angeles*; Louise Luckenbill, Ph.D., *Brown U.*; Malcolm C. Modrzakowski, Ph.D., *U. of Georgia*; Scott M. Moody, Ph.D., *U. of Michigan*; Finnie Murray, Ph.D., *U. of Florida*; Ellengene Peterson, Ph.D., *U. of California, Riverside*; Ronald Portanova, Ph.D., *Case Western Reserve U.*; Michael Rowe, Ph.D., *U. of California, Riverside*; Edwin C. Rowland, Ph.D., *Wake Forest U.*; Jeffrey Thomason, Ph.D., *U. of Toronto*; Leon C. Wince, Ph.D., *West Virginia U.*; John M. Zook, Ph.D., *Duke U.*

**Asst. Prof:** William Henley, Ph.D., *Colorado State U.*; William Holmes, Ph.D., *U. of California, Los Angeles*; Calvin B.L. James, Ph.D., *Howard U.*; Anne B. Loucks, Ph.D., *U. of California, Santa Barbara*; Brent Palmer, Ph.D., *U. of Florida*; Robert S. Staron, Ph.D., *Ohio U.*

**Instr:** Mary K. Eastman, M.S., *Ohio U.*; William Haviland, M.S., *Ohio U.*

### DEPARTMENT OF FAMILY MEDICINE

**Prof:** Anthony G. Chila, D.O., *Kansas City College of Osteopathic Medicine*; Frank W. Myers, D.O., *College of Osteopathic Medicine and Surgery, Des Moines*; David A. Patriquin, D.O., *Philadelphia College of Osteopathic Medicine*.

**Assoc. Prof:** John A. Brose, D.O., *Texas College of Osteopathic Medicine*; David E. Brown, D.O., *Kansas City College of Osteopathic Medicine*; Peter B. Dane, D.O., *Michigan State U. College of Osteopathic Medicine*; William F. Duerfeldt, D.O., *Kirkville College of Osteopathic Medicine*; Donna M. Mabry (part-time), Ph.D., *Ohio U.*; Daniel J. Marazon, D.O., *Kirkville College of Osteopathic Medicine*; Lewis J. Miller, D.O., *Kirkville College of Osteopathic Medicine*; Marjorie E. Nelson, M.D., *Indiana U. School of Medicine*; Lenard G. Presutti, D.O., *College of Osteopathic Medicine and Surgery, Des Moines*; Daniel J. Raub, D.O., *Philadelphia College of Osteopathic Medicine*; Judith W. Rhue, Ph.D., *Ohio U.*; Gerald Rubin, D.O., *Philadelphia College of Osteopathic Medicine*; Robert G. Stockmal, D.O., Ph.D., *Philadelphia College of Osteopathic Medicine*; Anthony J. Tenaglia, D.O., *Kansas City College of Osteopathic Medicine*; Thomas A. Thesing, D.O., *College of Osteopathic Medicine and Surgery, Des Moines*; Marlene A. Wagner, D.O., *Kirkville College of Osteopathic Medicine*; Richard W. Willy, D.O., *Kirkville College of Osteopathic Medicine*; John C. Wolf, D.O., *Kirkville College of Osteopathic Medicine*.

**Asst. Prof:** John C. Glover, D.O., *West Virginia School of Osteopathic Medicine*; Karl E. Harnisch, D.O., *Chicago College of Osteopathic Medicine*; Edward W. Schreck, D.O., *Chicago College of Osteopathic Medicine*; David N. Stroh, D.O., *Ohio U. College of Osteopathic Medicine*; Harold C. Thompson III, D.O., *Chicago College of Osteopathic Medicine*; Linda B. Tome (part-time), D.O., *Ohio U. College of Osteopathic Medicine*.



**DEPARTMENT OF OSTEOPATHIC MEDICINE**

**Prof:** Jerome L. Axelrod, D.O., *Philadelphia College of Osteopathic D.O., Philadelphia College of Osteopathic Medicine.*

**Assoc. Prof:** Norman F. Baker, D.O., *Philadelphia College of Osteopathic Medicine*; Paul E. Cadamagnani, D.O., *Chicago College of Osteopathic Medicine*; Steven G. Carin, D.O., *Philadelphia College of Osteopathic Medicine*; William H. Carlson, D.O., *Kirksville College of Osteopathic Medicine*; C. Thomas Clark, D.O., *College of Osteopathic Medicine and Surgery, Des Moines*; Richard H. Feeck, D.O., *Philadelphia College of Osteopathic Medicine*; James E. Foglesong, D.O., *Kirksville College of Osteopathic Medicine*; Constantine Makris, M.D., *U. Medical School, Athens, Greece*; John S. Molca, D.O., *College of Osteopathic Medicine and Surgery, Des Moines*; W. Randolph Purdy, D.O., *Kirksville College of Osteopathic Medicine*; William A. Seifer, D.O., *College of Osteopathic Medicine and Surgery, Des Moines.*

**Asst. Prof:** James Boes, D.O., *Chicago College of Osteopathic Medicine*; Gary Cordingley (part-time), M.D., *Duke U.*; Lorraine Martinez, D.O., *Ohio U. College of Osteopathic Medicine*; Robert Moore, D.O., *Kansas City College of Osteopathic Medicine*; Michael Tomc, D.O., *Ohio U. College of Osteopathic Medicine.*

**Philosophy**

**Prof:** Gene Blocker, Ph.D., *U. of California, Berkeley*; Donald Borchert (chair), Ph.D., *Princeton Theological Seminary*; Algis Mickunas, Ph.D., *Emory U.*; Albert Mosley, Ph.D., *U. of Wisconsin*; Charles Ping, Ph.D., *Duke U.*; Warren Rucht, (part-time), Ph.D., *U. of Pennsylvania*; David Stewart, Ph.D., *Rice U.*; Robert Weiman, Ph.D., *U. of California, Berkeley.*

**Assoc. Prof:** John Bender, Ph.D., *Harvard U.*; Cynthia Hampton, Ph.D., *Northwestern U.*; Elizabeth Smith, Ph.D., *U. of Washington*; Robert Trevas, Ph.D., *U. of Maryland*; George Weckman, Ph.D., *U. of Chicago*; Arthur Zucker, Ph.D., *U. of Minnesota.*

**Asst. Prof:** Elizabeth Collins, Ph.D., *U. of California, Berkeley*; Carol Van Kirk, Ph.D., *U. of Toronto.*

**Physical Therapy**

**Assoc. Prof:** Cynthia C. Norkin (director), Ed.D., *Boston U.*

**Asst. Prof:** Dennis Cade, M.S., *Boston U.*; Gary S. Chleboun, M.S., *Duke U.*; Rosalind S. Hickenbottom, Ph.D., *Emory U.*; Clyde Killian, M.S., *Indiana U.*; Marleen I. McClelland, Ph.D., *Ohio State U.*

**Physics and Astronomy**

**Dist. Prof:** Raymond Lane, Ph.D., *Iowa State U.*; Jacobo Rapaport, Ph.D., *Massachusetts Institute of Technology.*

**Prof:** Ernst Breitenberger, Dr. phil., *U. of Vienna*, Ph.D., *U. of Cambridge*; Ronald Cappelletti, Ph.D., *U. of Illinois*; Charles Chen, Ph.D., *U. of Maryland*; James Dilley, Ph.D., *Syracuse U.*; Roger Finlay, Ph.D., *Johns Hopkins U.*; Steven M. Grimes, Ph.D., *U. of Wisconsin, Madison*; Earle Hunt, Ph.D., *Rutgers U.*; David Onley, D. Phil., *Oxford U.*; Roger Rollins, Ph.D., *Cornell U.*; Edward Sanford, Ph.D., *Iowa State U.*; Folden Stumpf, Ph.D., *Illinois Inst. of Tech.*; Louis Wright (chair), Ph.D., *Duke U.*; Seung Yun, Ph.D., *Brown U.*

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**Asst. Prof:** Clyde Baker, M.S., *Ohio U.*; Charlotte Elster, Ph.D., *U. of Bonn*; Kenneth Hicks, Ph.D., *U. of Colorado*; Martin Kordes, Ph.D., *Case Western Reserve U.*; Prasan Kundu, Ph.D., *U. of Rochester.*

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**Assoc. Prof:** James F. Barnes, Ph.D., *Ohio State U.*; Gary Hawes, Ph.D., *U. of Hawaii*; Sung Ho Kim, Ph.D., *Columbia U.*; Michael J. Mumper, Ph.D., *U. of Maryland*; Alexander V. Prisle, Ph.D., *Brown U.*; Shirley Washington, Ph.D., *Howard U.*; David L. Williams (chair), Ph.D., *Columbia U.*

**Asst. Prof:** Delysa Burnier, Ph.D., *U. of Illinois*; John R. Gilliom, Ph.D., *U. of Washington*; James F. Henderson, Ph.D., *U. of Missouri*; Ronald J. Hunt, Ph.D., *Ohio State U.*; Joy Huntley, Ph.D., *Duke U.*; Andrew L. Katz, Ph.D., *Johns Hopkins U.*; Lewis A. Randolph, Ph.D., *Ohio State U.*

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**Asst. Prof:** Mark Alicke, Ph.D., *North Carolina U.*; Linda Bellush, Ph.D., *U. of Florida*; Christopher France, Ph.D., *McGill U.*; Christine Gidycz, Ph.D., *Kent State U.*; Paul Gleason (part-time), Ph.D., *Penn State U.*; Jeanne Heaton (part-time), Ph.D., *Ohio U.*; G. Daniel Lassiter, Ph.D., *U. of Virginia*; Benjamin Ogle, Ph.D., *Brigham Young U.*; Gary Sarver, Ph.D., *U. of Florida.*

**Instr:** James Short (part-time), M.A., *Ohio U.*

**Social Work**

**Assoc. Prof:** Miriam Clubok, M.S.W., *Wayne State U.*; Thomas Oellerich (chair), Ph.D., *Case Western Reserve U.*

**Asst. Prof:**

**Instr:** Richard W. Greenlee, M.S.W., *U. of Pittsburgh.*

**Sociology and Anthropology**

**Prof:** Rodney Elliott (emeritus, part-time), Ph.D., *U. of Colorado*; Orville Gursslin (emeritus, part-time), Ph.D., *SUNY, Buffalo*; Lena Wright Myers, Ph.D., *Michigan State U.*; Arthur Saxe, Ph.D., *U. of Michigan*; Robert Shelly, Ph.D., *Michigan State U.*; Alex Thio, Ph.D., *SUNY, Buffalo*; Eric Wagner (chair), Ph.D., *U. of Florida.*

**Assoc. Prof:** Elliot Abrams, Ph.D., *Penn State U.*; William Burkhardt (emeritus, part-time), Ph.D., *Wayne State U.*; Bruce Ergood, Ph.D., *U. of Florida*; Tibor Koertvelyessy, Ph.D., *SUNY, Buffalo*; Girard Krebs, Ph.D., *Cornell U.*; Bruce Kuhre, Ph.D., *Penn State U.*; Christine Mattley, Ph.D., *Washington State U.*; Martin Schwartz (chair), Ph.D., *U. of Kentucky*; Don Shamblin, Ph.D., *SUNY, Buffalo*; Robert Sheak, Ph.D., *Washington U.*

**Asst. Prof:** E. Leon Anderson, Ph.D., *U. of Texas, Austin*; Thomas Calhoun, Ph.D., *U. of Kentucky*; Diane M. Ciekawy, Ph.D., *Columbia U.*; AnnCorinne Freter-Abrams (part-time), Ph.D., *Penn State U.*; Emanuel (Mike) Polioudakis, Ph.D., *U. of Michigan.*

**Telecommunications**

**Prof:** Don Flourmoy, Ph.D., *U. of Texas*; Archie Greer (emeritus, part-time), M.F.A., *Ohio U.*; Drew McDaniel, Ph.D., *Ohio U.*; William Miller, Ph.D., *U. of Southern California*; Josep Rota, Ph.D., *Michigan State U.*; Joseph Slade (director), Ph.D., *New York U.*

**Assoc. Prof:** Charles Clift III, Ph.D., *Indiana U.*; Maisha Hazzard, Ph.D., *Bowling Green U.*; David Mould, Ph.D., *Ohio U.*; Karin Sandell, Ph.D., *U. of Iowa*; Arthur Savage, Ph.D., *Michigan State U.*

**Asst. Prof:** Vibert Cambridge, Ph.D., *Ohio U.*; Sheva Farkas, Ph.D., *Ohio State U.*; Roger Good, M.A., *Ohio U.*; George Korn, M.A., *Southern Illinois U.*; Michael Mirarchi, M.S., *West Virginia U.*; Jenny Nelson, Ph.D., *Southern Illinois U.*; Joseph Richie, M.M.A., *U. of South Carolina.*

**Instr:** David Aiken, M.Ed., *Ohio U.*; Jeff Redefier, B.S.C., *Ohio U.*; Paul Reece (part-time), M.Ed., *Antioch U.*; Sheila Wurtsbaugh, M.A., *Ohio U.*

**Theater**

**Prof:** Kathleen F. Conlin (director), Ph.D., *U. of Michigan*; Alvin Kaufman (emeritus, part-time), Ph.D., *Stanford U.*; Seabury Quinn, Jr., Ph.D., *Yale U.*; George Sherman, M.F.A., *Yale U.*; Robert L. Winters, M.A., *Michigan State U.*

**Assoc. Prof:** Ursula Belden, M.A., *U. of Michigan*; Holly Cole, M.F.A., *Carnegie Mellon U.*; Dennis Dalen, M.A., *U. of Kansas*; William Fisher, B.A., *Indiana U.*; L.S. Frazee, M.A., *Penn State U.*; Denise Gabriel, M.A., *Ohio State U.*; Henson Keys, M.F.A., *Florida State U.*; Robert St. Lawrence, M.A., *U. of Pittsburgh*

**Asst. Prof:** William F. Condee, Ph.D., *Columbia U.*; Kathy E. Deveck, M.A., *U. of Michigan*; Laura Parrotti, M.A., *SUNY, Binghamton.*

**Visual Communication**

**Prof:** Charles L. Scott (director), M.S.J., *Ohio U.*

**Assoc. Prof:** Edward E. Pieratt, M.A., *Ohio U.*

**Asst. Prof:** Christopher L. Carr, M.A., *Ohio U.*; Gary Kirksey, M.A., *Ohio U.*

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